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An explorative analysis of indicators of outcome for psychotic and borderline psychotic adolescents involved in the Adolescent Support Program, a Pittsfield Public School day treatment program.

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AN EXPLORATIVE ANALYSIS OF INDICATORS OF OUTCOME FOR PSYCHOTIC AND BORDERLINE PSYCHOTIC ADOLESCENTS INVOLVED IN THE ADOLESCENT SUPPPORT PROGRAM; A PITTSFIELD PUBLIC SCHOOL DAY TREATMENT PROGRAM

A Dissertation Presented

by

BETH SINGER

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School of Education

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Dedicated to the
young men and women
who inspired this study
and from whom I have
learned a great deal

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ABSTRACT

AN EXPLORATIVE ANALYSIS OF INDICATORS OF OUTCOME FOR PSYCHOTIC AND BORDERLINE PSYCHOTIC ADOLESCENTS INVOLVED IN THE ADOLESCENT SUPPORT PROGRAM; A PITTSFIELD PUBLIC SCHOOL DAY TREATMENT PROGRAM

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Practicing professionals in mental health and education are increasingly aware of and concerned about the emotionally disturbed adolescent. Young adults who are severely and chronically psychiatrically and socially impaired have become a major challenge to mental health agencies and school systems. As a result of legislation and judicial decisions, public school programs for the emotionally disturbed adolescent are on the rise. There exists a constant need for adequate community treatment-based information to instruct and guide the development of these programs.

This dissertation provides a multi-faceted examination of a public school day treatment program for psychotic adolescents and adolescents with borderline psychotic conditions. The examination includes an investigation of the psychiatric hospitalization histories of the client members with attention to pre- and post- program intervention. The

effect the implementation of the program has had on the identified mental health adolescent population is also explored. Additionally, the positive outcomes of involvement in the program are explored. These outcomes are related to client characteristics in an effort to determine predictors of outcome.

Study results indicate that the public school program explored is at least partially responsible for the improved quality of students' lives and the decrease in frequency and duration of psychiatric hospitalizations after program intervention. Furthermore, the results establish that this public school day treatment program is an effective alternative to residential placement or in-patient treatment for the population.

The study validates the concepts of normalization and least restrictive programming as defined and described in the study for the severely emotionally disturbed adolescent. It enhances the development and implementation of public school programs for this population as an alternative to hospitalization.

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CHAPTER I

INTRODUCTION

Background to the Problem

One of the issues practicing professionals in education, mental health, and medicine are becoming increasingly aware of and concerned about, is the severely emotionally disturbed adolescent. This interest is largely a result of the seemingly steadily increasing number of adolescent individuals displaying pathological disorders It seems that "something is changing for the worse as far as adolescents are concerned" (Rosenstock, 1985, p. 959). It appears that not only is the suicidal attempt rate increasing, but there is more acting out behavior, more depressions, and a diminished acceptance of community standards (Rosenstock, 1985). The young adult patient presents "the most dramatic risks both to themselves and to their communities" (Pepper & Ryglewicz, 1982, p. 388).

As a group, the severely emotionally disturbed adolescent represents a "high risk, a high priority and high anxiety for professionals and for the public" (Pepper & Ryglewicz, 1982, p. 390). Pepper and Ryglewicz identify some of the characteristics which make this population so dramatic. As a group, they show a high incidence of alcohol

and drug usage (1982). This is supported by a comprehensive prevalence study completed by the National Institute of Mental Health. The 18-25 year-old was determined to have the highest rate of drug abuse and dependence of all age groups (Myers, Weissman, Tischler, Holzer, Leaf, Orvaschel, Anthony, Boyd, Burke, Kramer & Stoltzman, 1984). This finding is further supported by Rosenstock (1985) who found that the incidence of substance abuse in the adolescents involved in his longevity study more than doubled between 1974 and 1982.

A second characteristic of severely emotionally disturbed adolescents is the high incidence of suicide and suicidal attempts (Pepper & Ryglewicz, 1982). Suicide is the third leading cause of death in the United States for the adolescent population of 15 to 19 years of age, in spite of the fact that it is probably significantly under-reported (Gispirt, Wheeler, Marsh & Davis, 1985). The adolescent suicide rate has tripled in the past twenty years (Rosenstock, 1985; Gispirt, Wheeler, Marsh & Davis, 1985). Currently in the United States approximately 5,000 deaths per year are attributed to suicide among adolescents, with the rates being 2 to 3 times higher for males than females (Gispirt, Wheeler, Marsh & Davis, 1985).

It is more difficult to evaluate the prevalence of suicidal attempts. It has been estimated that there may be 50

to 60 attempts for each reported death (McIntire, 1977). Barraclough, Bunch, Nelson and Sainsbury (1974) reported that fifty percent of persons who committed suicide had a history of previous attempts.

It appears that persons who commit suicide commonly have a history of episodes of self-destructive behavior (Gispert, Wheeler, Marsh & Davis, 1985). However, the relationship between suicidal behavior and depression in adolescents is less clear. The authors state, "It is accepted that depressed patients are at risk for suicide. Less well established is that suicidal patients, especially adolescents, are depressed" (p. 754). Affective disorders (major depression, manic-depression and dysthymia) affect 9.4 million Americans (Robins, Helger, Orvaschel, Gruenberg, Burke & Regier, 1984). The age range with the highest rate of affective disorders is the young adult, according to the National Institute of Mental Health study (Robins, Helzer, Orvaschel, Gruenberg, Burke & Regier, 1984). Adolescent depression, with or without documented suicidal behavior has more than doubled in the past eight years (Rosenstock, 1985).

A third issue making adolescent psychiatric pathology so challenging is the sizable incidence of law violations involving violence (Pepper & Ryglewicz, 1982). The psychiatric diagnosis of antisocial personality is attributed to approximately one in forty of the general

population. It is a disorder primarily associated with males, and is generally considered a "young person's disorder" (Robins, Helger, Weissman, Orvaschel, Gruenberg, Burke & Regier, 1984, p. 956). These findings are supported by Rosenstock's work. He found adolescent male admissions to a psychiatric inpatient facility over a nine-year period to be more aggressive, disruptive, oppositional, impulsive and anti-social than the female admissions (Rosenstock, 1985).

The remaining characteristics identified by Pepper and Ryglewicz as pertinent to adolescents are the high incidence of conception of children and for the majority, a high or total degree of financial dependence on public assistance programs or on the family (1982).

A final characteristic of this population is their low incidence of seeking treatment (Hirschowitz, Levy, 1976; Pepper & Ryglewicz, 1982; Shapiro, Skinner, Kessler, VonKorff, German, Tischler, Leaf, Benham, Cottler & Regier, 1984). "Young adults, who may be intermittently psychotic and who are severely and persistently impaired, both psychiatrically and socially, have become a major challenge to our mental health agencies across the country. They are our first group of seriously dysfunctional people to grow up spending little or no time in psychiatric hospitals and most of their time in the stressful life of the community" (Pepper & Ryglewicz, 1982, p. 389).

Kathleen Long expands on the premise that emotionally disturbed youngsters are "under-detected and underserved" (1983, p. 46). In addition to this population not initiating helpful services, "their deficits are not clearly defined nor well understood by professionals in either the field of health or education" (Long, 1983, p. 46). Emotional disturbance is a fluctuating category, capable of expansion or reduction, based on local definitions, attitudes, and resources (Bower, 1982).

The consequences of unnecessarily or inappropriately determining a child to be emotionally disturbed are serious. Such mislabeling can deter a child's social and intellectual development, and stigmatize the child and his or her family and the community (American Orthopsychiatric Association, 1978). Potentially more serious is the failure to properly identify and appropriately serve a child with serious emotional disturbance. The long-term results of untreated emotional disturbance can include family disruption, school and work failure and destructive anti-social behavior (Long, 1983).

The public school system seems particularly lacking in its identification of and provision for the emotional disturbed student (Grosenick & Huntze, 1980). Although Public Law 94-142 clearly mandates appropriate programming for all handicapped students, seriously disturbed children -

especially adolescents - are unlikely to be served, or are served by agencies outside the public schools (Vetter-Zemitzsch, Bernstein, Johnston, Larson, Simon & Smith, 1984).

There appears to be a lack of consensus regarding appropriate education provisions for disturbed adolescents (Schmid, Algozzine, Maher & Wells, 1983). Algozzine and Sherry (1981) assert that the field is in transition as traditional service provisions for screening and identification, classification and placement, and instructional planning are being examined and critiqued. Long ascertains that, "no active screening efforts exist for emotionally disturbed children" (1983, p. 54).

Further support of this premise is offered by Klinje, Culbert and Piggott (1982). These authors contend that little research is available on the treatment efficacy of the adolescent. One reason for this paucity of information has been the lack of assessment tools with which to measure the adolescent (Klinje, Culbert & Piggott, 1982).

Closely related to the issue of screening and detection of emotionally disturbed students is the concept of stigma. In numerous school districts, officials reported that emotional disturbance was seen as a negative and stigmatizing label by both teachers and parents. This was in contrast to labels for most other types of handicapping conditions (Long,

1983). "Emotional disturbance, alone, tended to be seen as the fault of the child her/himself or his/her parents, rather than a disability for whom no one was to blame" (p. 53). It is postulated that this negative view of emotional disturbance is associated with "poor efforts to detect and serve emotionally disturbed children" (Long, 1983, p. 53).

The National Secondary School Survey was conducted to obtain information regarding service delivery to learning disabled and emotionally disturbed adolescents. The survey's sampling included special education directors and teachers in all fifty states with 40% and 31%, respectively, responding. Of the 1,794 teacher responses, 222 indicated emotional disturbance as their primary area. This is slightly more than 12% of the total responses (Schmid, Algozzine, Maher & Wells, 1984).

The authors report, based on the analysis of 222 responses, that the majority of the sample (59%) work in resource room settings, while 25% are assigned to self-contained classrooms. The remainder work in crisis rooms and itinerant arrangements. The teachers' ranking of their role components placed remediation of academic skills as primary, followed by modifying student behavior and developing student coping skills (Schmid, Algozzine, Maher & Wells, 1984). It would appear that the extensive use of personnel in resource rooms is a result of the general

acceptance of the concept of the least restructive environment (Schmid, Algozzine, Maher & Wells, 1984).

Public school programs for the emotionally disturbed traditionally focused on the younger, more easily managed student (Whelan, 1981). The older, stronger, more sexually mature student has historically been excluded from public school programs (Wood, 1980). However, there appears to be a new trend developing. Public school teachers and programs for the emotionally disturbed adolescent are increasing (Lawrenson, McKinnon, 1982). This trend is likely to be the result of legislation and judicial decisions, and the acceptance of the concept of normalization (Pepper & Ryglewicz, 1982).

The principle of normalization was first defined in 1969 by Niels Bank-Mikkelson and Bingt Nirge. The principle, although initially applied to services for mentally retarded individuals, has recently been expanded to apply to all human services. Bank-Mikkelson states, "the purpose of a modern service for the mentally retarded is to normalize their lives. For children, normalization means living in their natural surroundings, playing, going to kindergartens and schools, etc. Adults must have the right to leave the home of their parents, to be trained and taught, and to pursue employment. Whatever services and facilities are open to all

other citizens must, in principle, also be available to the mentally retarded" (Scheerenberger, 1983).

In Massachusetts, the Mental Retardation Regulations define normalization as "the utilization of means which are as culturally typical as possible, in order to establish and/or maintain personal behavior and characteristics which are as culturally typical as possible".

The common theme of these definitions is the encouragement of services which are as close as possible to the life styles and life patterns of persons who do not have handicaps. Normalization suggests that the harmonious blending of typical life patterns and specialized support will enable handicapped persons to lead a fulfilling life as contributing members of society (Scheerenberger, 1983).

Normalization is accomplished by (1) integrating existing residential, educational and leisure programs for handicapped persons into the mainstream of society, (2) using existing community services which all citizens enjoy, and (3) by creating new community alternatives for handicapped persons where none now exist (Scheerenberger, 1983).

The principle of normalization is closely related to the concept of the least restrictive environment and to the practice of deinstitutionalization.

The policy of deinstitutionalization and its corollary policies, admission diversion and short-term

hospitalizations, in the field of mental health, is the counterpart to education's least restrictive environment. Together they have helped produce the current trend toward public school programming for the severely emotionally disturbed adolescent.

The provisions of legislative acts and judicial decisions, as well as administrative actions in the establishment of educational rights of all children are well accepted at this point in time. The mandates of P.L. 94-142 as well as state statutes and regulations and local educational agency policies adhere to the intent of an appropriate public education in the least restrictive environment regardless of severity of the handicapping condition. This commitment to provide an education to every child is probably the single-most important influence on the treatment of severely emotionally disturbed adolescents in recent practice. It is this concept that brought educational opportunities into hospital settings and helped increase the existence of private residential treatment programs. The mandate to provide an appropriate education in the least restrictive environment is a relative concept. For the severely emotionally disturbed adolescent, it has generally been accepted that residential and/or hospital environments are in fact the most appropriate and least restrictive programs available. Certainly, they offer a far better solution to

the problem of programming for these youngsters than the previous practice of exclusion.

The addition of "school programs" as an integral piece of hospital programs for the adolescent has further offered an opportunity to study and evaluate its usefulness and effectiveness in the treatment process. Furthermore, it has offered an arena to develop specific educational strategies for this population.

It would seem that this population is amongst the last to receive attention from the educational professionals. Clearly an opportunity and need for investigation and study exists for the education professional in the treatment of the severely emotionally disturbed adolescent.

Intent of the Study

The intent of this dissertation is to examine a public school day treatment program: the Adolescent Support Program, for adolescents of Berkshire County, Massachusetts, who are psychotic or manifest borderline psychotic conditions. This study is intended to ascertain specific characteristic indicators of outcome for this population. Outcome is defined for the purpose of this study as the quality of life as determined by the Oregon Quality of Life Questionnaire and the absence of institutionalization.

Significance of the Study

This study will be of the following significance:

(1) It will be of benefit to the Adolescent Support Program in assessing the prognosis of referred adolescents;

(2) It will benefit the Pittsfield Public Schools in further definition and development of the Adolescent Support Program and future therapeutic programs;

(3) It will benefit other agencies and school systems seeking information concerning establishing and implementing day treatment programs for emotionally disturbed adolescents;

(4) It will help clarify the role of day treatment as an alternative to residential programming, thereby offering support to the least restrictive, appropriate placement concept;

(5) It will add to the literature of treatment for psychotic adolescents and adolescents with borderline psychotic conditions.

Limitations

There are several limitations to this study which need to be addressed:

1) The sample population was not randomly selected.
2) There is no control group for comparison study. This is because a non-treatment control group is not a reasonable approach to mental health/special education services. Furthermore, access to records and clients in a comparable program is not available.
3) Educational achievement is not included as an indicator of outcome as an independent variable.
4) The Oregon Quality of Life Questionnaire is a self-perception survey. Results indicate the feelings and understanding of respondents.
5) The findings are limited by time constraints. A maximum of five years duration has passed between the survey and client discharge from the program. Thus, long-term implications are not appropriate.
6) Findings are limited by the small sample size. This is particularly evident in the regression analysis statistics.

Delimitations

Delimitations for this study include:

1) Findings are delimited to the specific population under investigation. Due to the small sample size and the homogeneous nature of the group, findings can not be generalized to other populations.
2) Findings concerning the Adolescent Support Program refer to the concern only the period of time between 1980 and 1986.

Research Questions

(1) How has the frequency and duration of psychiatric hospitalization changed for Berkshire County adolescents between 1976 and 1986?
(2) Does involvement in the Adolescent Support Program influence the number of hospitalizations and lengths of stay for client members?
(3) What is the outcome, as measured by the Oregon Quality of Life Questionnaire, on average, of involvement in the Adolescent Support Program on client members?
(4) What is the model profile of students attending the Adolescent Support Program?
(5) Which student background characteristics predict outcome?

Definition of Terms

Specific terms used in this research proposal are defined as follows:

Entry Age - calculated by subtracting date of birth from date of entry into the Adolescent Support Program. Date of entry is established by the signing of an Individual Education Plan by all necessary parties. Age is rounded off to the nearest month using the 15th day of the month as the midpoint.

Entry Grade - based on Legal Education Agency records.

Length of stay - total number of months enrolled in the Adolescent Support Program. This includes those days for which outreach services were provided, but not those for which follow-up services were provided. Number of days are rounded off to the nearest month.

Gender - Sample population respondents will be coded:

0 - male
1 - female

Socio-economic level- Based on and grouped according to family eligibility for the free lunch program as determined by the Pittsfield Public Schools.

Coding - 1 - those sample respondents who are eligible for free lunch

2 - those sample respondents who are eligible for reduced lunch

3 - those sample respondents not eligible for reduced or free lunch.

Intelligent quotient - the full-scale score on the most recently administered Wechsler Intelligence Scale for Children - Revised (WISC-R) or Wechsler Adult Intelligent Scale (WAIS)

Hospital days - total number of days spent in an in-patient psychiatric hospital or a psychiatric ward in a general hospital

Degree of Pathology - Member clients have been grouped into four categories, based on their histories, involvement with agencies, behavioral characteristics, and scholastic functioning.

Group I: Severely and chronically emotionally disturbed clients

This group is comprised of chronically mentally ill adolescents; their extensive dysfunction includes

paranoia, psychosis, severe withdrawal, schizoid personality and depression. They have a history of recent psychiatric hospitalization of three months or more and/or repeated inpatient episodes. They have little or no impulse control and may be dangerous to themselves and others. They have a record of extensive involvement with the social welfare system including more than one out-of-home placement.

Scholastic performance is substantially below grade level expectations as determined by norm-referenced achievement testing. They are presently unable to attend regular school. Emotional disturbance interferes substantially with learning ability.

Group II: Short-term emotional illness

This group is comprised of severely emotionally disturbed adolescents primarily with a diagnosis of adolescent adjustment reactions, depression, suicidal gestures and paranoia. The condition has lasted for a minimum of six months. Short-term psychiatric hospitalization (less than thirty days in the past year) may have occurred. Out-of-home placements and other social service involvement may

have been necessary. These clients are able to use community services in a limited way.

Scholastic performance is substantially below grade level expectations. Ability to concentrate and motivation are impaired.

Group III. Recurring psychiatric and violent episodes

This group is comprised of adolescents whose mental health needs are manifested through behaviors such as substance abuse, destructiveness, and assault. They are known to the mental health system through family involvement and are often identified very early by school personnel. They may have a history of short-term psychiatric hospitalization. They have commonly been involved with the juvenile justice system/social services, and may have entered the DMH system via Department of Social Services (DSS) or Department of Youth Services (DYS). These adolescents demonstrate little or no impulse control and can be dangerous to themselves and others.

Scholastic performance is substantially below grade level expectations. School attendance has been sporadic. Acting-out behavior interferes with school performance.

These adolescents are dependent on services to provide management due to their limited functioning.

Group IV: Acute emotional crisis

This group is comprised of adolescents who are experiencing an acute emotional crisis. These clients, whose usual functioning would be substantially higher, are experiencing a sharp decrease in the very recent past. Previous psychiatric hospitalization is rare, but out-of-home placements may have occurred. These youth have generally had previous involvement in therapeutic out-patient services, families may have participated as well. These adolescents have experienced a loss of impulse control, are disruptive, acutely depressed and/or suicidal. A characteristic of this group is erratic emotional behavior, while social and educational functioning is more stable.

Additional agency involvement - concurrent services received by sample respondents from other adolescent/youth providers in the community while enrolled in the Adolescent Support Program; i.e.- Department of Social Services, Department of Youth Services, Juvenile Probation, Key Inc., Meridian Associates,

Berkshire Mental Health. Each additional, concurrent agency involvement will be given a numerical value of 1 and be accumulative.

0 = no additional agency involvement

1 = 1 additional agency involvement

2 = 2 additional agency involvements

3 = 3 additional agency involvements

etc.

Sample respondents - Those eligible client members of the Adolescent Support Program who participate in this research proposal. Two possibilities for eligibility as a sample respondent exist:

1) enrolled in the program for a minimum of nine consecutive months between September 1980 - December 1986, or
2) currently enrolled in the program.

The total number of eligible client members equals 43.

Adolescent Support Program (ASP) - a day-treatment program for identified psychotic adolescents and adolescents with borderline psychotic conditions between the ages of 13-22 who reside in Berkshire County. ASP is jointly funded and administered by the Pittsfield Public Schools and Department of Mental health. Services

offered include: outreach, special education, vocational training, individual, group, family, milieu and network therapy, recreation, and follow-up.

The Adolescent Support Program

Introduction

The Adolescent Support Program (A.S.P.) was created in 1980 in response to the need for community-based programs due to Massachusetts judicial decisions to deinstitutionalize the mental health system. The A.S.P. was one of several programs designed to service the mentally ill of Berkshire County who were, at the time, residing in Northampton State Hospital. The need for a day program for the severely emotionally disturbed adolescent was felt by both the Department of Mental Health (DMH) and the Pittsfield Public School System (PPS).

These two agencies collaborated in the effort to establish a program which would maintain the severely emotionally disturbed adolescents of Berkshire County in their home community. The PPS acts as the vendor agency for the DMH contract in addition to funding approximately half of the total program costs.

The program is housed in a PPS building which is not utilized by regular education. The ASP and the Pittsfield Alternative High School share the building. Several offices are also located in the building; the clinical psychologist for the PPS, a Chapter 1 office, and a Vocational evaluation

center. The A.S.P. presently occupies three standard classrooms and an office in the school.

In addition to jointly funding A.S.P., DMH and PPS co-administer the program. Major decisions and changes are negotiated as well as participating in the admission and discharge of students. At this point in time, the A.S.P. is the only program in Massachusetts in which the DMH and a public school system function as partners.

Philosophy

The A.S.P. uses a problem-solving model and focuses on stabilization of students and their families. The philosophy is based on the underlying assumptions that, given the appropriate opportunities, structure and supports, students with serious and on-going problems can progress and learn to cope with their difficulties. A second assumption upon which the program philosophy lies is that change occurs through action. Learning new skills, behaviors and patterns is accomplished by using structured opportunities to think, practice, and experience success.

The concept of the milieu, the structured therapeutic environment, pervades the A.S.P. philosophy. The provision of a safe, predictable and controlled environment is essential for learning appropriate behavior and developing

skills. A.S.P. staff is consistently present, acting as role models and forming positive attachments.

The A.S.P. philosophy is further based on the belief that adolescents have specific needs in several areas of life including education, vocation, socialization, recreation, and residence. Thus, A.S.P. works to address individual student needs in each of these areas in a structured manner.

Program Goals

The primary goals of A.S.P. are:

Goal 1 - to maintain the severely emotionally disturbed adolescents of Berkshire County in their home community, thereby avoiding hospitalization and/or residential treatment placements

Goal 2 - to aid in the reintegration of adolescents who have been institutionalized, hospitalized

Goal 3 - to provide opportunities to grow, learn, and develop problem-solving skills

Goal 4 - to develop students' interpersonal skills

Goal 5 - to develop students' abilities to cope with and manage stress

Goal 6 - to prepare students for independent and adult living

Goal 7 - to engage parents/families in working with students

Goal 8 - to provide access to and delivery of additional or different services as indicated

Goal 9 - to provide a safe, predictable environment for students

Program Description

A.S.P. is a comprehensive therapeutic/educational day treatment program. It is designed to offer an identified population of at-risk adolescent clients an opportunity to develop and learn about themselves and others. The program focuses on the major components of an adolescents' life: education, vocation, socialization and recreation, family and/or residence. The staff, services, and interventions are organized to offer maximum growth in these areas. In addition to providing a safe, structured environment in which students can function, the program works toward reintegrating hospitalized adolescents into the community and its resources. The program utilizes a problem-solving approach with supportive tracking and opportunities to engage in self-study projects.

Program Components

1. Therapeutic Services

   The foundation of the treatment modalities and therapeutic services is the milieu. Structure, limit-setting and consistency are provided by a supportive staff of role models. A variety of specific treatment modalities are offered to students and their families by the A.S.P.

Individual Counseling - Generally utilizing a problem-solving approach geared toward reality testing, individual counseling is offered to every student. The frequency and duration of the service are flexible and are determined by the student and counselor.

Group Therapy - Group therapy sessions occur twice weekly and are encouraged for all full-time students. The groups are co-facilitated by two staff and generally last forty-five minutes.

Family Therapy - This treatment modality is provided, as appropriate, by the clinical social worker often in conjunction with a co-therapist. Co-therapy can be provided by an additional A.S.P. staff member, A.S.P. consulting psychiatrist, or a clinician from an additional service-providing agency. Generally, family therapy sessions are scheduled weekly for sixty minutes and can be arranged at the A.S.P. site, or in the home.

Expressive Therapies - The expressive therapies have included art therapy, music therapy, and movement therapy. Each has been provided by the Pittsfield Public School personnel or through contracting with independent professionals. Generally, each expressive therapy session is offered weekly.

2. Special Education Services

The services of special education are designed to meet the individual needs of each student. Based on an extensive educational evaluation, an individual educational plan is agreed upon. The A.S.P. offers an opportunity to earn high school credits toward a diploma, tutorial services toward a high school equivalency diploma or basic skill remediation. Educational services are provided within the framework of Chapter 766 guidelines and are therefore available through the age of 22. Annual re-evaluation of academic progress is available throughout student tenure in the program.

3. Vocational Services

Three types of vocational services are offered through the Adolescent Support Program. These consist of 1) vocational evaluation, 2) vocational placement services, and 3) vocational training services. The vocational training program, Kids Kafe, is a food trades business which is operated by A.S.P. students. Essentially, Kids Kafe is a mobile restaurant which delivers lunches throughout the community on a phone-in/take-out basis. The business is self-supporting, and profits are re-invested in additional equipment.

During the traditional school year, Kids Kafe operates from the A.S.P. site and is staffed by A.S.P. students (including those receiving follow-up services) and staff. During the summer months, Kids Kafe moves to downtown Pittsfield and is located within St. Stephen's Church. the summer Kafe includes a sit-down restaurant providing a daily luncheon menu to local merchants, shoppers, and tourists. The summer Kafe employs several additional non-A.S.P. students who would have difficulty finding and maintaining private sector employment. All employees of Kids Kafe are paid an hourly wage, $1.00 per hour, during the school year, minimum wage in summer.

The goals of Kids Kafe are:

1) To provide "unemployable" disturbed adolescents an opportunity to work and receive wages.

2) To provide a safe and controlled work environment in which the students can learn several aspects of the restaurant business.

3) To provide a work setting in which students have the opportunity to interact with the community appropriately.

4. <u>Recreational/Social Activities</u>

In response to the program goal of reintegrating students into the community, a structured recreational

component was included in the program. Recreational activities are offered in the daily program schedule as a means of bringing the milieu into the community. Additional activities are also offered two evenings per week. The recreational program is geared towards individual needs and is therefore structured accordingly. The structure accommodates individual recreation and small group activities.

This program component is further utilized as a vehicle for engaging resistant students and staffing students beyond program hours who are experiencing an acutely difficult time. Thus, the recreational, social activity program piece is a vital extension of the milieu providing therapeutic services and an opportunity to practice behaviors in various settings and conditions as well as a means of offering a peer group activity for enjoyment.

Program Services

1. Outreach Services - This service is designed to engage the exceptionally resistant adolescent (or the family of the adolescent) in services and the program. The outreach service is based on individual need and can be accommodated through any one or combination of the program components. The services can continue for up to 90 days with extensions if progress is observable.

2. Family Services - For those families for which family therapy is inappropriate, unacceptable, or inadequate, additional services are offered in an attempt to involve parents in the program. These services include a parent support group and parent-staff progress and planning meetings. Network therapy is an additional service which is offered as appropriate.
3. Crisis Intervention Services - The A.S.P. professional staff is available on a 24-hour basis to provide crisis intervention services to students and their parents. The specific interventions are determined individually, but can include accessing additional community services such as the emergency shelter, and the psychiatric unit of the general hospital. The crisis intervention service is available 50 weeks per year.
4. Follow-Up Services - Those students who have been discharged from the program and continue to be interested in services are eligible for follow-up. The specific services available to these students includes all program components except special education. Typically, counseling, family meetings, recreational activities, and/or employment in Kids Kafe are available. Follow-up services are available for one year post discharge.

5. Case Management-Advocacy Services. As many students in A.S.P. are involved with multiple agencies and service providers, a case manager is often appropriate to unify treatment plans. Furthermore, A.S.P. students require advocates within the community. A.S.P. provides these services as appropriate for full-time program participants.

Staffing

Although additional staff has been provided for special occasions, the staff consists of four professional staff members, one paraprofessional and one secretary. Although role delineations are flexible, the job titles and organizational structure are illustrated in the chart on the following page.

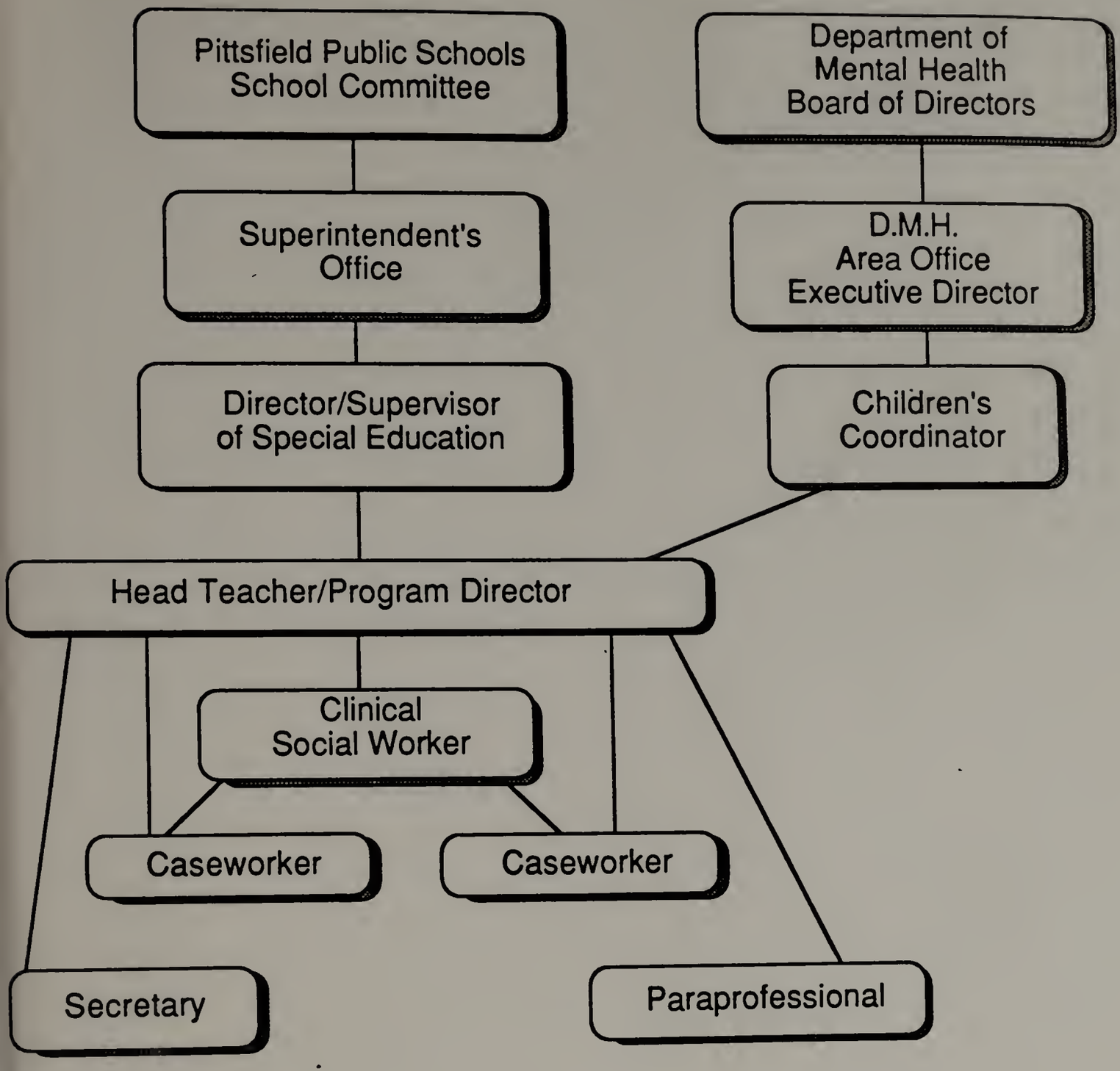
Each professional staff member has responsibility for one program component. Typically, the Head Teacher/Program Director is responsible for implementing the special education component, the clinical social worker is responsible for the therapeutic component and caseworkers are responsible for vocational and recreational programming. In addition, caseworkers and the clinical social workers have a caseload of students for individual counseling. Group therapy is co-facilitated by two of the professional staff and the clinical social worker is responsible for family treatment services. All staff participate in the milieu.

The A.S.P. has a relationship with Williams College Psychology Department, Berkshire Community College, and the Urban League Foster Grandparent Program. Each of these provides students or volunteers to participate in the A.S.P. as negotiated.

The Adolescent Support Program further contracts with community resources and professionals as consultant to fulfill specific programmatic needs.

Population

The target population of A.S.P. is the 13-22 year old adolescent who is experiencing severe emotional disturbance, specifically psychosis and borderline psychotic conditions. Both acute and chronic clients are eligible for the program. Community clients must be identified as at risk of psychiatric hospitalization and de-institutionalized adolescents are given priority. Adolescents must be residents of Berkshire County. There is no financial eligibility requirement and no gender ratios. The program capacity is twelve full-time students.



Organzational Chart

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

It is the goal of this literature review to present studies relevant to the treatment of psychotic adolescents and adolescents with borderline psychotic conditions. Of primary interest are outcome studies which focus on program models and designs, including in-patient, day-patient, medical and educational models. A secondary goal of this review is to present information relevant to this specific population, and the preferred treatment models.

Inpatient Treatment/Medical Model

Description

The function of inpatient treatment is to diagnose and treat psychiatrically disordered children, adolescents and adults. It is a 24-hour service, 7 days per week. The primary decision maker is a psychiatrist who has final medical and legal responsibility for the patient's care. Although inpatient facilities vary in size, type and setting, they usually include a variety of number, type, and quality of staff within the unit. Adolescent and children's units usually include a school component (Halpern, 1980).

Typically, inpatient units spend two to three weeks assessing the patient through observation, interaction and formal evaluation methods. Family dynamics and interactions are assessed as well during this period. Academic assessment is included for youth (Herz, Endicott, Spitzger & Mesnihoff, 1971).

The inpatient unit provides a therapeutic milieu. The social group allows for social skills training to occur, and provides an opportunity for building confidence and self-esteem. In activity based programs, mastery of specific tasks is also an important piece of the program (Halpern, 1980).

Inpatient units have the capacity to structure a daily program designed to overcome specific deficits. For example, severely impaired language can be accommodated by training in sign language (Hartmann, Glosser, Greenblatt, Solomon & Levinson, 1968).

Certainly, one of the most recognized advantages to inpatient treatment is the potential for good communication. In a single setting, with controlled numbers of possible interactions, the staff has the opportunity to maintain close tabs on each patient. As treatment involves the entire staff of the unit, not only the primary therapist, this is very important (Halpern, 1980).

The school component of adolescent inpatient units is usually quite different than a conventional school. Emphasis tends to be on developing feelings of competence and mastery in a learning situation where skill building is the focus (Halpern, 1980).

Goals

The goals of psychotherapeutic treatment in a hospital unit are often to help the child/adolescent tolerate emotional stress and develop stronger, more effective defenses against anxiety (Henrickson & Holmes, 1959). Treatment tends to focus on conflicts in real life with emphasis on ward behavior. This is a supportive, re-educative process for the patient. As stated by Alexander and French (1946), "No insight, no emotional discharge, no recollection can be as reassuring as accomplishment in an actual life situation in which the individual has failed" (p. 142).

Inpatient units offer further services. According to Herz, Endicott, Spitzer and Mesnikoff (1971), hospitals provide a carefully designed structure of discipline - the patient is "taken care of". Moreover, a high staff-patient ratio has the opportunity to provide an environment which demonstrates competence, undoes pathology, prepares the patient for therapy and provides learning experiences.

A basic rationale for hospitalization of children and adolescents is that it forces separation. This

separation leads to a breakdown in defenses which in turn makes therapeutic interventions possible (Mahler, 1979).

Indications

Psychiatric hospitalization is usually considered the treatment of choice for patients who are demonstrating severely irrational behaviors and thoughts to the extent that outpatient care seems impossible (Halpern, 1980). As socially unaccepted behaviors arise to the degree that they are no longer tolerable in society, placement in a hospital again seems to be clinically accepted as the treatment of choice. A third condition for placement exists when the family situation is such that it continually interferes with the child/adolescent's development and progress. A fourth need for hospitalization is when the complexity of the pathology requires continuous and intense observation, assessment and treatment (Halpern, 1980).

In summary, indications for hospitalization tend to be protective in nature. Patients who are homicidal, suicidal, or who have not benefited from less intense programming are most commonly referred for inpatient services.

Inpatient care can be long-term or short-term. Long-term generally refers to lengths of stay beyond six months, short-term refers to ninety days or less (Hirschowitz & Levy, 1976).

Short-term hospitalization usually accommodates acute psychiatric conditions such as depressive reaction, schizophrenic reaction, manic states, situational reactions to stress, and decompensations of chronic conditions. Long-term treatment, on the other hand, tends to accommodate medical-psychiatric illnesses such as anorexia, those patients who do not have access to quality community services, and those whose alternative treatment would be incarceration (Hirshowitz & Levy, 1976).

Outcome Studies

Mental health professionals who provide the wide range of educational and treatment experiences for varying populations must account for the validity of treatment decisions and the usefulness of their approaches. They must therefore be able to answer such questions as the following:

When is long term inpatient care necessary?

When can we expect outpatient treatment to be sufficient?

What treatment approaches will be most helpful to what patients and under what circumstances?

Who can, and who can not, be treated effectively by currently known techniques?

Studies which define the patient, family, and treatment variables that relate to long-term outcome move toward more definitive answers to these crucial questions.

Gossell, Lewis, Lewis, and Phillips (1973) published an adolescent follow-up study delineating six variables

reported to be reliably and significantly related to long-term outcome of psychiatrically hospitalized teenagers. Three of these relate to the patients themselves: (1) severity of psychopathology, (2) onset of symptomatology, (3) intelligence. Two correlates referred to the nature of the hospital treatment: (4) presence of a specialized adolescent unit or program, and (5) completion of hospital treatment. The final factor pertained to aftercare: (6) continuation of therapy following discharge.

In the later follow-up study by Gossell, Barnhart, Lewis and Phillips (1977), fifty-five teenagers between 13 and 19 years were followed for between twenty months and a four-year period, post discharge.

The results indicate all variables were related in the expected direction; that is, better outcome was experienced by patients who had higher energy level, less physically threatening behavior, less severe symptoms, completed treatment, and participated in psychotherapy following discharge. The authors further concluded that diagnostic severity accounted for the largest portion of predictive power. They found, for example, that out of the 15 psychotic patients in the sample, nine functioned poorly at follow-up.

Generally, the literature seems consistent in identifying the strongest predicators of long-term outcome as those associated with severity of the patients'

psychopathology, and those that differentiate recently occurring as opposed to long-standing psychiatric dysfunction. Furthermore, these two sets of factors appear to have a consistent pattern of interaction (Hirshowitz & Levy, 1976).

Patients who are diagnosed as neurotic have a very high probability of being evaluated as functioning well several years after hospital discharge, regardless of length of stay or longevity of symptoms. Patients given a diagnosis of process or chronic psychosis during adolescence have a very low probability of being able to function well several years after hospital treatment, although a very small number do seem to recover. (Gossell, et al, 1977).

Further support of these conclusions is demonstrated by Weiss and Glasser (1965). In a comprehensive study, they looked at three measures of outcome, as judged by the patient's therapist at discharge from the hospital; severity of illness at discharge (clinical status), change in severity of illness (difference between admission and discharge scores), and clinical change as measured by the Global Improvement Rating Scale. The following tables illustrate their findings at discharge:

Severity of Illness at Discharge

Severity	Number of Cases
High	14
Moderate	20
Low	14
Total	48

Change in Severity of Illness

Change in Severity	Number of Cases
Same or slightly worse	16
Slightly improved	21
Moderately improved	11

Global Improvement Rating

Worse	1
Same	11
Slight Improvement	19
Moderate Improvement	14
Great Improvement	3

This research goes on to evaluate the adolescent patients six to twelve months after discharge, in an effort to ascertain the kind of transition made from the hospital to

the community by this sample of fifty-five. The following tables illustrate their findings:

Adjustment to Family

Adjustment	Number of Patients
Unknown	4
Well adjusted	5
Fairly well adjusted	12
Skewed adjustment (family adjusted to patient)	9
Not adjusted	25
Total	55

Work/School Adjustment

Adjustment	Number of patients
Unknown	4
Attending school, work, or both - good adjustment	13
Attending school, work - poor adjustment	6
Not working, not attending school - at home	14
Special placement - school or treatment center institutionalized	13
Other (in-service, married)	3
Total	55

Social Adjustment

General Level of Social Activity	Number of Patients
Unknown	9
Has heterosexual relationship	10
Has group of friends of same sex	4
Has one friend and acquaintance	2
Has one friend only	6
Associates and acquaintances	6
Friends from hospital only	6
Confined to family	6
Total	55

Rating of Improvement

Rating of change in patient since admission	Number of patients
Unknown	4
Improved	30
No change	10
Worse	11
Total	55

Level of Functioning

Level of functioning	Number of patients
Unknown	4
Good	1
Fair	19
Poor	16
Institutionalized	15
Total	55

Thus only one patient was rated in the overall Good Adjustment category. Since the majority of this sample came from intact family units, were housed in middle-class homes in decent neighborhoods, and returned to their families and homes after discharge, it would seem that hospital treatment was not sufficient. The authors conclude that, "It is our conviction that a strong, stable aftercare program, available to deal with crises as they arise, is crucial to a good transition from hospital to home" (p. 382).

Although the published long-term follow-up reports on seriously ill adolescents are scarce, the findings generally suggest that psychotic adolescents do not show significant improvement as a result of inpatient hospitalization (Hirshowitz & Levy, 1976). Earlier, Masterson (1958) concluded that neurotic adolescents maintained improvement,

psychotic adolescent patients had a "high rate of deterioration" (p. 1097).

A five-year follow-up study at Massachusetts Mental Health Center reports "A significant tendency toward improvement, however most of the patients remained seriously ill and none were free of symptomatology (Hartmann, Glasser, Greenblatt, Solomon & Levinson, 1968). This study further concluded that there was no evidence that continued psychotherapy was useful. The MMHC project attributed the gradual improvement of patients as due to the gradual adjustment of the adolescent to his environment and community and vice versa, and secondly to natural maturation.

Neuringer (1974) found that fifty percent of the hospitalized adolescent sample repeated suicide attempts after release. This finding was supported by Rutler in 1976. These reports further confirm the poor prognosis for seriously ill adolescents who receive inpatient care.

The Mount Sinai Hospital established an adolescent unit primarily designed for schizophrenic patients.

Their goal was to help severely disturbed individuals decrease suffering and increase effectiveness in coping with the challenge of living. No claim was made for a fundamental cure in the program. However, they concluded that hospitalization serves several purposes:

1) Inpatients feel better
2) Clinical states improve
3) Ability to trust increases
4) Better peer relationships develop
5) Coping skills increase
6) Movement toward autonomy happens
7) Handling of stress is better
8) Depression yields to separation anxiety
9) More optimistic, hopeful attitude develops

The central rationale for inpatient care for psychotic adolescents and adolescents with borderline psychotic conditions is the provision of a structured environment. Mayer (1985) states "A structured environment is valuable therapeutically for psychotic adolescents" (p. 784). He further defines the "major need" of adolescents to be an environment which provides a safe, secure setting in the least disruptive manner. This concept was supported by Masterson (1973).

The initiation of a structured milieu program for adolescents is indicated in the treatment of a range of psychiatric disorders. The structure is not meant to be the primary treatment modality, but the framework in which treatment can be managed (Mayer, 1985). The goal, according to Mayer, of psychiatric inpatient programs is "to provide

for continued growth and readjustment, especially when treating adolescence" (p. 784).

Mayer (1985) describes an inpatient program which accommodates 26 adolescents. The program components include education, individual pychodynamic psychotherapy, counseling and family therapy. The program utilizes a "credit system" to aid internalization of appropriate behavior. The author distinguishes this system from a behavior modification system in that it is not an objective, rigid, reward/punishment-oriented system which is generalized across all patients and is behaviorally oriented. The credit system is highly subjective, flexible, individualized, and oriented to the world outside the hospital. It is essentially described as a system of measurement and documentation rather than reward and punishment.

Although evaluative (outcome) data is not available, the author proposes this in-patient program model as an alternative to the more common methods utilized to structure institutional settings, i.e. behavior modification and level systems. Mayer proposes that such systems are contraindicated by a psychodynamic approach as they tend to be "intrusive and/or controlling and therefore contaminate treatment" (p. 791).

Mayer's program provides a consistent therapeutic environment for adolescents, achieved through the staff's ability to refer to standing policies (unit structure) and treatment strategies (individual treatment plans).

This environmental structure "fosters the perception, by patients, that it is a safe place in which they can trust themselves to deal with their internal turmoil" (1985, p. 792).

Residential treatment centers are an alternative to hospitalization for the severely disturbed adolescent. Residential treatment offers a total structure as does hospitalization, but is not based on a medical model (Munson, 1984).

Adams (1980) studied the effectiveness of a residential treatment center. He used the Goal Attainment Scaling technique developed by Kiresuk and Sherman (1968). Using this technique, each individual is given certain goals and the level of success is measured for different behaviors. Adams ascertained that those students who completed the residential treatment program scored much higher on the scale than those who dropped out. He concluded that "behavioral change is possible and measurable for acting-out adolescents (p. 526), thus adding to the support of residential treatment programs for this population."

Wagner and Breitmayer (1975) offer further support for completion of a residential program. Defining success as: the absence of reinstitutionalization, pending reinstitutionalization or exclusion through legal channels, after the subjects return to the community. Failure is defined as the presence of the above criteria. The authors findings indicate a significant correlation between success and program completion. Sixty-nine percent of clients completing the program were "successful", whereas 71% of clients not completing the program were "failures".

The residential treatment program model is educationally based rather than medically based as would be the case for most psychiatric hospital programs. However, some hospital programs emphasize the educational approach. Such is the case in the Austin State Hospital program described by Northcutt and Tipton (1978).

According to these authors, the 54-bed unit of Austin State Hospital is a facility for 16-20 year old adolescents with a predominantly (80%) psychotic diagnosis. The authors specify schzophrenia, manic-depressive psychosis and borderline syndrome as the predominant forms of psychosis within the unit.

The adolescent patients in this hospital program progress through a set of three stages beginning with a closed unit emphasizing chemotherapy. Educational services

on this unit consist of limited recreational and art activities. The second stage of treatment is administered in an open setting called the Ward Schedule. In this stage, adolescents participate in a token economy system. Treatment goals are established with the patient during this stage and various scheduled activities are available. Classes in woodworking, horticulture, social skills, occupational therapy, drama, art, basic math, reading, and writing classes are offered as well as recreational activities. Classes are small (8 to 10 students) and provide a continued means of evaluation; affect, attitude, attention span, retention, motivation, and general skill levels are assessed. Medication continues to be the primary treatment modality in this stage.

Adolescent patients enter the third stage of the hospital program when they demonstrate the assumption of more responsibilities and achieve short-term goals. This stage is referred to as the Adolescent Day School and is located on the periphery of the hospital. A regular schedule of individualized and self-paced classes is offered based on the guidelines of the local school district. The expectations are set based on the behaviors which will be demanded in the discharge plan placement, be it school or work.

The authors state that one-third of the adolescent students in the classroom schedule (stage 3) return to public school settings, either special education or regular education programs. Most of the remaining two-thirds of the adolescents find placement in a general equivalency diploma program, vocational program or a job (Northcutt and Tipton, 1978).

The average length of stay in this program is six weeks. No mention is made of psychotherapeutic interventions. Thus, Northcutt and Tipton present a hospital-based program which utilizes an educational model as the focus of the milieu program (1978).

The negative aspects of hospitalization are evident in the literature. Hirshowitz & Levy (1976) plead, "Institutionalization can do harm. Every effort should be exercised to prevent needless institutionalization and to combat proneness to the institutional condition during needed institutionalization" (p. 47). Greenblatt found that the separation process involved in hospitalization was a very difficult one, leading to feelings of abandonment in both parents and children. He states, "In various degrees, often seriously, these feelings interfered with the ability to utilize the therapeutic elements of the environment" (p. 173).

Additional support against hospitalization of psychotic adolescents is offered by Levenstein, Klein and Pollock. They state that adolescents fare more poorly than other patient groups as they are rehospitalized sooner, more frequently, and for longer periods of time (1966).

Bloom and Hopewell (1980) examined the relationships between the reinstitutionalization rates of a diagnostically heterogeneous group of emotionally disturbed adolescents and a selected set of patient demographic and clinical variables. The purpose of their work was to establish empirical data and knowledge relevant to mainstreaming re-entry of hospitalized adolescents.

Eighty-eight discharged adolescents from a Virginia state mental hospital between June 1976 and January 1979 were studied. This sample did not include any adolescents who were transferred to any additional institutional setting (i.e., psychiatric facilities, residential schools). All eighty-eight members of this study were discharged to the community (homes, foster homes, group homes). These adolescents came from a variety of home situations and social agency involvements. The mean age was 16.0, mean full scale WAIS I.Q. was 81.8, and the average grade completed in school was 8.0. Of the subjects, 48 were male, 40 female, 36 black, 52 white. Subjects were ascribed a variety of DSM II (American Psychiatric Association, 1968) diagnostic labels

falling under the following major psychopathology categories: transient situational disorders (N=29), behavioral disorders (N=21), personality disorders (N=8), neurosis (N=3), organic brain syndrome (N=4), and psychosis (N=13).

A stepwise discriminant function analysis was obtained to ascertain the significant differences between adolescents who were reinstitutionalized within six months following discharge and those who remained in their communities beyond the six-month period. Nineteen variables included:

1. Sex and race
2. Age at discharge
3. Patient status - voluntary
   - involuntary
   - court ordered
4. Diagnosis
5. Hospital catchment area
6. Length of stay
7. Number of previous hospitalizations
8. Age at first referral
9. Hospitalization of family member
10. Family structure
11. Number of siblings
12. Highest grade completed

13. Intelligence quotient
14. Type of discharge
15. Living arrangements at discharge
16. Educational/vocational placement at discharge
17. Prognosis at discharge
18. Out-patient referral at discharge
19. Reinstituionalization

The authors found that within six months of discharge, 43% were reinstitutionalized. Several variables were identified as significant in discriminating recidivists:

1. Educational/vocational placement
2. Length of hospitalization
3. Family structure
4. Hospitalization of family member
5. Living arrangements at discharge
6. Race

Bloom and Hopewell offer additional support to the negative aspects of hospitalization - namely, its lack of success.

In the group of fifty successful adolescents, 54% were enrolled in public school educational programs, whereas 28.9% of the 38 recidivists were in similar educational placements. Of the 50 successful adolescents, 14% did not

have an educational placement compared to 34.2% of the unsuccessful group. This was the most significant difference between the two groups. Nearly twice as many of the successfully discharged subjects were placed in public school programs. Conversely, over twice as many recidivists had neither an educational nor a vocational placement. The authors conclude that "adolescents placed in public school programs are the most likely to be successfully reintegrated into their communities" (p. 355).

Ferdinand and Colligan (1980) made several recommendations to better ensure a successful re-entry into mainstream society from psychiatric hospitalization. They suggested a case manager, mutual interprofessional planning, clear follow-up arrangements for providing multi-disciplinary services, and a primary focus on the mainstream education environment.

These recommendations are reiterated by Bloom and Hopewell (1982), calling for case managers, mutual planning and especially educational placements of high quality for hospitalized adolescents re-entering their communities.

Day Treatment

Underlying Assumptions

Day treatment programs began in the 1950's for schizophrenic and other seriously emotionally disturbed children and adolescents (Hirschowitz & Levy, 1976). The justification for this type of program development is based on two underlying assumptions. The first is that home is the lesser of two difficult and costly choices. Home in this sense not only applies to the family residence, but genetically to the home-community environment. The second assumption is that an early intervention can prevent and/or ameliorate later problems, thus children who are not in a life-threatening status can receive community services which will act to prevent the need for incarceration or hospitalization (Freedman, 1982).

There are several rationales connected to this treatment. In the spectrum of services offered to seriously disturbed youngsters, residential care is often too severe an option, whereas out-patient treatment is not enough supportive service for growth of the patient. Day treatment programs fill this gap in services. The partial removal of the child from the home i.e. - all day - has thus become an important treatment mode in recent years (Hirschowitz & Levy, 1976).

In addition to being more cost effective than residential - hospital care, day treatment programs provide clinical benefits. When a youngster is worked with in his own community and environments, the potential for continuity of treatment is enhanced. The long-range plan can be a single avenue of direction. Time, energy, and efforts are not spent on adjustments to superficial environments; connecting to and terminating from temporary relationships. Remaining in a community provides permanence of group membership. An in-patient leaves home, enters a hospital, is discharged and returned home where he must establish new connections, new friendships, etc. for a second time (Hartmann, Glasser, Greenblatt, Solomon & Levinson, 1968).

Remaining in the community provides for continuing the routine of daily life. Peer, family and group relationships are not disrupted. School and whatever other community systems the youngster is involved in also remain constant. Conversely, the re-entry issues are eliminated, if one is not removed from the community. Stigma of psychiatric hospitalization or residential placement is avoided (Hartmann, Glasser, Greenblatt, Solomon & Levinson, 1968).

Further clinical advantages include the avoidance of a separation trauma which can be a result of the alienation associated with leaving family, friends, school, etc. Also, the danger of institutional accommodations is reduced or

avoided. Dependency needs are less stimulated by remaining in the community (Connell, 1961).

Therefore, autonomy or the potential for autonomy are enhanced. Connell (1961) states, "Not only is it advantageous to treat these adolescents as outpatients, but also one can move in earlier and earlier with the necessary limit setting. These efforts hasten the therapeutic process." He further states, "When a day hospital is available, the demand for residential inpatient facilities lessens" (p. 973).

Atkins proposed that day treatment may be optimal for all degrees of intensity of pathology including the most severe. This differs from the original intent of day programs which was to service less severe pathology than in-patient care but more intense pathology than outpatient treatment. Atkins points out the reduced negative impact of rejection and scapegoating by maintaining the patient in the home and avoiding total separation from the family. This is, of course, dependent on the family's cooperation and the presumption of a degree of home stability (1977).

James Masterson decided "to put the matter of day treatment to the test and found comparable results were possible with carefully selected patients" (p. 251). His criteria of selection was not based on severity of pathology but was based on four necessary conditions: (1) no heroin

addiction, (2) stabilized school functioning, (3) ability to control behavior once engaged in therapy, and (4) parental capacity to control behavior. Masterson based his hypothesis on a limited number of case studies with which he reports 80% success (1973).

Description

Generally, there are two models of day treatment programs. The first developed from the inpatient model and is a medical/hospital program. Generally affiliated with an inpatient facility and often sharing the same physical plant, staff, and service components. The second is the school model. Housed in a setting separate from inpatients, this model relies more on educational personnel to provide the services. Typically a school model program works in collaboration with a psychiatic team and provides a daily program of education, socialization, individual, and family therapy (Hirschowitz & Levy, 1976).

Thus a day treatment program can be part of an inpatient unit or a separate entity attached to a hospital, or in a physical plant of its own. Most day treatment programs are designed for populations of from 4 to 40 clients with or without parents. The clients can be selected on the basis of diagnosis, social or age groups or a more heterogeneous basis. The program can be scheduled daily or for various

parts of the week, month or year. It can operate as an attachment to adult services, children's services or be an independent adolescent program. The staff is usually multi-disciplinary in structure with emphasis on developing a therapeutic milieu (Hirschowitz & Levy, 1976).

Connell (1961) found that the "philosophy employed to reach the therapeutic milieu is dictated in part by the specific site, general setting, population, problems to be met, and in part by the outlook and beliefs and personality of senior staff" (p. 975) Thus, within the broad parameters of day treatment as defined above, tremendous potential for diversity and flexibility exists.

Early literature relative to day treatment programming seems to focus on the spectrum of patients for whom psychiatric day hospitals and day treatment programs are appropriate. Zwiler and Wilder (1964) reported the results of a study in which they answered the question, "For whom is the day care program feasible?" People who came to the emergency room of the Bronx Municipal Hospital for psychiatric hospitalization were randomly referred either to the inpatient service or to the day hospital, a few miles away. Approximately 2/3 of the people referred to the day hospital could be managed there. Of the 1/3 rejected by the day hospital, 1/2 had organic brain syndromes. These figures were supported by later studies both at McLean's Hospital and

the Washington Heights Community Mental Health Center, where 75% and 69% respectively were able to profit from the day programs (Washburn & Grob, 1973).

The above reports are supported by the claims of Winston and Crowley (1970). Their experience at the Potomac Foundation concluded that "96% of referred patients can be managed in a day hospital or a less complex facility" (p. 246).

All findings seem to indicate that there continues to be significant numbers of patients requiring intensive treatment around the clock (Zwiler & Wilder, 1964; Washburn & Grob, 1973; Winston & Crowley, 1970). Perhaps the number varies somewhat based on the specific catchment area and the specific treatment center involved. In all of these studies regarding who can manage or be tolerated in day hospitals, no specific grouping by either age or pathology was considered. Thus the findings pertain to the general psychiatric population, not specifically to psychotic and borderline psychotic adolescents. Specific literature on random placement of adolescents in either day or 24-hour programs seems to be lacking.

Washburn and Grob (1973) reported the results of a long-term follow--up study of the first one hundred people who entered the McLean Hospital Day Center. Most of the sample had experienced inpatient care, were diagnosed as

psychotic and borderline psychotic, but were not limited to adolescents. Findings indicate that 79% of all the patients were improved, 8% unchanged, and 12% worse. This finding further supports the efficacy of the day treatment model.

During the 1960's Kris compared patients of the Manhattan State Hospital inpatient unit with the day hospital program. A random selection process was used, 70 people in each sample. Again, no mention of patient age is made. Striking findings were reported. The average length of stay for the day program was seven weeks. The average length of stay in the state hospital was nine months. The social adjustment at follow-up was about the same, and yet twice as many day patients as inpatients returned to work within one year (1961).

The Herz, Endicott, Spitzer and Mesnikoff study completed at the Washington Heights Community Mental Health Center seems to be more elaborate. In this study all patients received the same kind of treatment experience except that the day patients lived at home. Herz found that day patients remained in the program an average of seven weeks as compared to nineteen weeks for inpatients, that day patients remained out of the setting longer before relapse, and after four weeks, day patients performed better on mental status and social functioning measures. The differences between the two groups after one year were less extreme. Nevertheless, the

day patients continued to function better on daily routine, leisure time and housekeeper functions (Herz, Endicott, Spitzer & Mesnikoff, 1971).

Each of these studies evaluates outcome on the basis of different levels of behavior. Therefore, different kinds of results are to be expected. All the studies emphasize findings which are supportive of day treatment programs, but include comparisons which show that at some point the differences between in-patient and day programs become less distinguishable.

Zwerling and Wilder (1964) reported that most patients they selected for inpatient treatment could be managed in a day treatment program. This was especially the case if brief inpatient care were readily available. During the 1960's, a number of studies were conducted which focused on the idea that the shorter the length of hospitalization, the better the outcome. The concept of alternative care, or after-care programs continued to find support. The literature seems to present a consensus of opinion that extended high- quality hospital care for psychotic patients is not an ideal treatment modality. The most effective program seems to encompass several treatments (Herz, Endicott & Spitzer 1977).

Smith, Kaplan and Siker (1974) compared outcomes of first hospitalization of patients with those receiving

community mental health day services. The comparison of the two groups indicates that after four years, the community mental health center population:

(1) spent fewer days as inpatients

(2) were less disabled

(3) had cost less per patient per capita

(4) demonstrated lower cost-benefit ratio

This study's samples included a diagnostically categorized population of 64% borderline clients, 13% psychotic clients, and 18% neurotic clients. The authors found that in both groups, 5% of the population in each group was not improved (Smith, Kaplan & Siker, 1974).

Approaching this issue from a slightly different perspective, W.A. Anthony found that inpatient treatment improved inpatient behavior, but did not effect post-hospital adjustment as measured one year after discharge. He did find, however, that post-discharge services do make a significant difference as measured by social and vocational adjustment (Anthony, 1979).

In summary, the literature of the sixties and seventies suggests that most psychiatric patients who require hospitalization can be effectively treated in a relatively short-term setting, followed by day treatment placement. Furthermore, the literature seems to indicate that with

adequate outpatient resources, hospitalization can be avoided altogether for many patients who were formerly hospitalized.

Thus far the literature which has been discussed regarding day treatment has been based on the medical model. It seems that the majority of early day programs were affiliated with hospitals.

Although a day treatment program based on the educational model can be affiliated with a hospital, they usually are not. Educational day programs seem to be affiliated with universities, private agencies, mental health community centers and local educational agencies. As the literature indicates, day treatment programs for this population are not often found within public schools.

Day Treatment/Educational Model

Although the educational/therapeutic setting of choice for seriously mentally ill adolescents has historically been psychiatric hospitalization and day hospitalization, with responsibility for primary care being relegated to mental health professionals, over the last 25 years educational programs have been developing (Northcutt, Tipton, 1978). Public schools began providing for behaviorally disordered students in the 1960's (Vetter-Zemitzsch, Bernstein, Johnston, Larson, Simon & Smith, 1984). Nevertheless,

according to these authors, "seriously disturbed children - especially adolescents - are unlikely to be served, or are served by agencies outside the public schools" (p. 1, 1984).

Grosenick has reported a heavy reliance by school districts upon private schools and other out-of-district placements (1981). Although some public school programs exist at the secondary level, few published research reports are available on successful or effective educational programs for the seriously disturbed adolescent (Vetter-Zemitzsch, Bernstein, Johnston, Larson, Simon & Smith, 1984).

In an atmosphere of conceptual uncertainty among both clinicians and educators as to how the problems of the psychotic and borderline psychotic adolescent should be addressed, there appears to be rising theoretical opinion and public support for services being provided by the local community (Gurry, 1985). Additionally, the implementation of both state and federal legislation has established a mandate for community-based care to provide the least restrictive alternative (Gurry, 1985).

Thus, in the 1980's the literature begins to address the educational alternatives developing for adolescents who had previously, and for the most part continue to be, exempted from public schools on psychiatric grounds (Freedman, 1982).

Although these programs may differ widely in methodology, they generally share the common goal of stability and are based on the underlying philosophical assumption that this goal is best met by maintaining the individual in the community. The major change agent in programs of this model is the educational milieu, the enhancement of achievement and potential. An educational milieu is comparable to a therapeutic milieu. It provides a structured environment in which a variety of human relationship and emotional interactions are available (Anthony, 1979).

Opportunities to learn and master skills and situations are offered in an attempt to develop personal and social competence. Within this milieu, additional, specific treatment is planned, the aims of which are to enhance feelings of respect, appreciation, approval and to reduce anxiety and conflict (Anthony, 1979).

Educational day treatment programs generally employ strategies and interventions which focus clients' attention to specific tasks, minimizing distraction. The central force of the program is the establishment of a positive relationship which controls and limits destructive or inappropriate behavior and enhances learning via successful experiences. The three R's of an educational day treatment

program have been labeled "Routine, Regularity, and Reward" (Northcutt & Tipon, 1978).

It is an underlying assumption that growth can be facilitated or catalyzed by a wide array of interventions. In addition to the more traditional therapeutic modalities, found in medical model programs, educational day treatment programs often utilize social activities, work experience, rehabilitation, occupational therapy, and school tasks as tools toward mental health (Hershowitz & Levy, 1976).

Freedman described a New Jersey State Department of Education non-public school program for "emotionally disturbed adolescents," a term not specifically defined. The program, the Union County Learning Center (UCLC), is an alternative day school designed to serve students who can not function in a regular school setting without extraordinary personal difficulty and/or disruption of the school regimen. The goal of the program is to "return them to the mainstream as quickly as possible." (1982, p. 425). The population involved in this day program have long histories of "academic and emotional failures," having been excluded from special education classes in public and/or private schools. The UCLC program consists of a highly structured educational milieu with individual and group therapy as well as social, recreational activities.

The results of a program evaluation indicated that "students did make gains and eventually function in the mainstream. With few exceptions the individuals made academic and behavioral gains that had not been evidenced in their previous placement." (Freedman, 1982, p. 426)

The sample population of 60 adolescents had a mean length of stay of 1.74 years. After leaving the center, 28% returned to the educational mainstream, 45% were returned to special education resource room programs, and 27% entered the work force. "Those students who were severely disturbed were placed either in sheltered workshops or in residential settings." (Freedman, 1982, p. 426)

The long-term follow-up study of this sample led to a subsample of 42. Of this number, 37 (88%) reported no recurrence of deviant behavior. Thirty-five (83%) were functioning in the mainstream - 16 in school and 19 in the work force. Freedman concludes, "The efforts and involvement in such an intensive day treatment program does demonstrate long-lasting gains. It would appear that, for certain individuals, a total program with a well integrated philosophy and treatment approach can have far reaching implications and enable segments of the population to function effectively within the mainstream of society." (Freedman, 1982, p. 427).

Another example of a program based on the educational day treatment model is offered by LeVine and Greer. These authors describe a restrictive educational program provided by a public school agency in conjunction with and located on a university campus. The program has a capacity of 7-8 "emotionally disturbed adolescents" and provides educational, recreational, and therapeutic services including individual, group and family therapy within an educational milieu. The staff consists of a special education teacher, a paraprofessional, a half-time psychologist and university student interns and graduate assistants.

The student population involved in this program is described as possessing one or more of the following characteristics: exhibited school phobia; exhibited behavior that was socially incompatible with peers (abused and/or humiliated by others, or abusive and/or humiliating to others); exhibited inability to adapt to normal school routines due to various abnormalities including multiple handicapping conditions.

The results of yearly assessments are reported to show decreases in inappropriate behaviors for all adolescents. the authors report the "model has been successful in enabling severely emotionally disturbed adolescents to come to school regularly, to change their attitudes and reactions to self

and others and to be mainstreamed into the public school classrooms" (LeVine & Greer, 1984, p. 522).

As an extension of this study, the authors implemented a secondary investigation to ascertain whether the gains accrued during placement in the day treatment program were maintained long term. For this purpose, the authors looked at the subsample of students who had been successfully reintegrated into public school and had been attending regular education for at least one year.

With a subsample of 24, 7 (29%) were involved in some public school in the United States, 1 (4%) had graduated high school, 4 (17%) were in an institutional setting, 7 (29%) had dropped out of school, and 5 (21%) did not respond. Furthermore, the results of the Burk Behavioral Rating Scale showed statistically significant decreases in inappropriate behaviors between the time of mainstreaming and the follow-up.

The authors interpret these results to demonstrate that the gains students accrued in emotional and behavioral adjustments while in the program were maintained upon return to the regular classroom environment. In most cases, the authors continue, students were reported to be continuing to progress in overall adjustment and personal contentment at follow-up. The authors state that these results were corroborated by the Burk Behavioral Rating Scale as well as

the phenomenological measures completed by parents and students (LeVine & Greer, 1984).

The authors conclude that for specially selected emotionally disturbed adolescents, a restrictive environment seems to allow them to work through significant personal issues. Comments by the students, parents, and teachers suggest that the protectiveness of the environment was an essential therapeutic element freeing the students of the stress of coping with their maladaptive patterns among peers and teachers in public school. They could thus focus on building the necessary personal skills for more appropriate adaption. Upon their return to public school settings, inappropriate behaviors were sufficiently modified and their attitudes toward school and life were significantly more positive, enabling them to continue to progress in overall adjustment (LeVine & Greer, 1984).

This research, therefore, further supports the educational milieu as an effective environment in assisting significantly disturbed adolescents and offering "critical therapeutic benefits which lead to long-term gains." (LeVine & Greer, 1984, p. 526)

In Oak Park, Illinois, a public school program for behaviorally disordered adolescents has been established within the local high school. In the absence of well documented models, the On-Campus (OC) Program was developed

by trial and error, by careful evaluation of student progress, and by assessing progress toward the goals of mainstreaming and graduation (Vetter-Zemitzsch, Bernstein, Johnston, Larson, Simon, & Smith, 1984).

The stated goal of the On-Campus Program is to "help behaviorally disordered adolescents develop the behavioral, social, emotional and academic skills necessary for a satisfactory readjustment to mainstream education and eventually society" (Vetter-Zemitzsch, Bernstein, Johnston, Larson, Simon, & Smith, 1984, p. 1).

The population of the On-Campus Program - behaviorally disordered adolescents - is defined as those having one or more of the following characteristics to the degree of impeding educational progress for a duration of at least one year:

1) The demonstration of severe acting out behavior and disruptive behavior not requiring physical restraint in two or more classes;

2) previous hospitalization for emotional problems and the need for extraordinary support prior to returning to the regular high school program;

3) severe depression in students who chronically exhibit social withdrawal, excessive anxiety, and/or physical symptoms or fears associated with personal and school problems;

4) diagnosed as psychotic or borderline in personality functioning;

5) students displaying serious suicidal potential.

Families of eligible students are described as being at either extreme of cohesiveness - disengaged or overly enmeshed. Their problem-solving strategies tend to be chaotic or rigid and many parents report being worn out, thus giving up on the child's education (Vetter-Zemitzsch, Bernstein, Johnston, Larson, Simon & Smith, 1984).

The philosophy of the OC Program is based on the assumption that students are best served in facilities located within the local high school campus. The goal of the program is to reintegrate into the mainstream as soon as possible, thus the OC Program tends to be a short-term placement. The program is based on the premise that "structure and support are essential to assist severely behaviorally disordered adolescents" (Vetter-Zemitzsch, Bernstein, Johnston, Larson, Simon & Smith, 1984, p. 2). The program thus offers maximum supervision with a logical system of consequences to enhance student understanding of the effects of behaviors on the self and others.

The program is relatively large, consisting of 24 staff members (12 of which are educators) and servicing seventy-four students. The authors used longitudinal data regarding school attendance, learning performance and

classroom behavior as a measurement of success. This data indicates that average daily attendance rose 46% for those in the program. The average number of classes passed increased by 48% in the first two semesters of participation in the OC Program (Vetter-Zemitzsch, Bernstein, Johnston, Larson, Simon & Smith, 1984).

The authors concluded that "this program is a viable intervention for adolescents at the senior high school level" (p. 8). They base this conclusion on the relative small cost of the program, as well as the "success" of the student participants. The authors identify the integration of psychological and educational services within the local high school" where normalization has the highest possibility for success," as the crucial components in this program (1984, p. 8).

CHAPTER III

RESEARCH DESIGN

The design of this research proposal is based on five research questions:

(1) How has the frequency and duration of psychiatric hospitalization changed for Berkshire County adolescents between 1976 and 1986?

(2) Does involvement in the Adolescent Support Program influence the number of hospitalizations and lengths of stay for client members?

(3) What is the outcome, as measured by the Oregon Quality of Life Questionnaire, on average, of involvement in the Adolescent Support Program on client members?

(4) What is the model profile of students attending the Adolescent Support Program?

(5) Which student background characteristics predict outcome?

The rationale for and explanation of these five research questions follows. Also discussed are the methodology to be used and the means of data collection.

Subjects

Subjects of this study include client members of the Adolescent Support Program who meet one of the following eligibility requirements:

1) enrolled in the program for a minimum of nine consecutive months between September, 1980 and December 1986, or

2) current enrollment in the program.

The total number of subjects equals 43.

All subjects are residents of Berkshire County, are between the ages of 13 and 22, and have documented mental health and special education needs.

Research Question I - How has the frequency and duration of psychiatric hospitalization changed for Berkshire County adolescents between 1976 and 1986?

The primary goal of the Adolescent Support Program is to reduce the psychiatric hospitalization of Berkshire County adolescents. This program was designed to provide an alternative treatment modality for the identified population of psychotic adolescents and those manifesting borderline psychotic conditions. The Adolescent Support Program acts to reduce the placement of this specific population in psychiatric hospitals as well as providing a day program to those adolescents who are currently engaged in a hospital program, thereby shortening the length of hospital placements. Reducing the frequency and rate of hospitalization is in keeping with the theories and practices of normalization, deinstitutionalization, and least restrictive environment.

It is a goal of this study to determine how effective the Adolescent Support Program has been, in the past six years, in achieving these goals. It is suspected that among the

identified mental health adolescent clients, fewer days have been spent in psychiatric hospitals since the inception of the Adolescent Support Program. It is further suspected that a negative correlation will exist between the number of hospital days and the number of years of existence of the Adolescent Support Program.

The first research question will be addressed by collecting the following data:

(1) total population of identified mental health adolescents of Berkshire County who have been psychiatrically hospitalized since January 1, 1979

(2) total number of days each adolescent resided in a hospital setting.

These data will be grouped to form relevant intervals and analyzed for frequency distributions and measures of central tendency on an annual basis. Comparisons will then be made between pre-Adolescent Support Program years and subsequent years.

Research Question II: Does involvement in the Adolescent Support Program influence the number of hospitalizations and lengths of stay for client members?

The sample population is comprised of the 43 eligible respondents who have been or are currently enrolled in the Adolescent Support Program. This group of adolescents has been extracted from the larger population of Berkshire County adolescent mental health clients addressed in Research Question

I. Number of days hospitalized before placement will be compared to number of days hospitalized after discharge.

Research Questions I and II of the research design attempt to relate the treatment program to the rate of psychiatric hospitalization of Berkshire County adolescents, thus determining if the program successfully meets its primary goals. Furthermore, this is an indirect approach to examining the effectiveness of the treatment program on the sample population; an approach which is clearly not intended to prove a direct relationship.

As empirical research of the problem can not be accomplished, the investigator will approach the problem in terms of explorative field research. Both quantitative and qualitative measures will be used.

In summary, the use of rate of psychiatric hospitalization (number of hospital days) of identified mental health adolescent clients in Berkshire County (the total population) is an attempt to ascertain the degree to which the Adolescent Support Program is fulfilling its primary goal, and more generally, to determine the general direction of outcome on the sample population. Thus, if the number of days Berkshire County adolescents spent in psychiatric hospitals declined after the treatment program was introduced, it could be assumed that the treatment program is at least partially related to that

decline. This would indicate that the Adolescent Support Program is successfully fulfilling its primary goal.

Research Question III: What is the outcome, as measured by the Oregon Quality of Life Questionnaire, on average, of involvement in the Adolescent Support Program on client members?

The second approach to looking at the results of placement in the Adolescent Support Program is designed to explore the outcome, on average, on the sample members of the study. Outcome will be investigated in terms of aspects of quality of life.

Each respondent member of the sample will be assessed using the "Oregon Quality of Life Questionnaire". The questionnaire will be administered using an individual interview method. The rationale for choosing the interview method of data collection is four-fold:

(1) The instrument was initially designed to be administered in this way;

(2) The sample members are more likely to participate in the process if personal contact is used. Individual time with the researcher would be a motivation for participation;

(3) Through personal contact the researcher can address questions and concerns regarding the process and rights of privacy as well as alleviate content confusion on specific items and help maintain concentration;

(4) Personal interview affords the researcher information not otherwise available. For example, a gross assessment of the mental status of the sample member can act as an additional reliability check. For this reason, in-person interviews are preferable to phone contact. Administration of the questionnaire by telephone interview will only occur in cases where the subject is geographically unreachable.

The choice of personal interview as the method used for administering the questionnaire is not without negative virtues. As discussed by Good (1963), the inter-personal action developed between the respondent and the interviewer decreases the validity of the instrument. Responses could become a function of the relation between respondent and researcher rather than a response to the specific item. Nevertheless, considering the nature of the sample population, the personal interview method of obtaining the data is considered most likely to yield the best information.

The "Oregon Quality of Life Questionnaire" was developed by Bigelow, Brodsky, Stewart and Olson (1980) for use specifically with mental health clients. The authors field-tested the instrument within a basic research design; pre- and post- tests were administered to the study sample as well as a community comparison group. Furthermore, Bigelow, Brodsky, Stewart and Olson's field testing was carried out in a variety of sites in

which the specific treatment modalities varied. Also, the length of and amounts of service, types of problems approached, and demographic characteristics of the client groups varied. The "Oregon Quality of Life Questionnaire" was designed to evaluate community mental health programs.

The authors of the instrument provide some psychometric data. Using Cronback's alpha, the internal consistency of each scale was calculated (Cronback, Glaser, Nanda, & Rajaratnam, 1972).

Two of the sixteen scales did not have adequate homogeneity: the close friend scale and the meaningful use of leisure time scale. The authors state that "Most of the scales, however, have quite sufficient internal consistency, and even the weak scales have sufficient internal consistency to be useful measures of program effectiveness" (Bigelow, Brodsky, Stewart, & Olson, 1980, p. 359). The authors further infer the instrument to be adequately reliable based upon successful standardization of interviewing and an interviewer accuracy rate of 98.4%.

The validity of the instrument is reported to be "moderately good" by the authors, that is, agreement on item selection, number of items per concept and clarity of items is acceptable. The authors field-tested the instrument to further establish validity. The instrument fulfilled the expectations for its performance.

In summary, the "Oregon Quality of Life Questionnaire" was deemed appropriate for use in this research study. It has adequate reliability and validity measures; it was designed specifically for a mental health client population; and it was designed to measure the effectiveness of community mental health programs.

For the purposes of this exploratory research, the "Oregon Quality of Life Questionnaire" will not be administered only as a post test design, and only to the members of the sample, nor will it be administered to a group. The information retrieved from the questionnaire will demonstrate frequency distributions and measures of central tendency for the sample population at various stages during and after program involvement.

The data retrieved by this work will later serve as the dependent variable in exploring the relationship between outcome and specific background characteristics of the sample population.

The use of 'quality of life' as a measurement of outcome is a common practice in mental health research and is based on a theoretical framework.

Theory of Quality of Life

The primary indicator of mental illness, and a large component of symptomatology, is dissatisfaction or distress.

Hallucinating, pacing, posturing, are extreme states of feeling bad, and all manifestations of dissatisfaction. Distress is a strong motivator of patients and practitioners to seek amelioration of mental illness. Furthermore, as community mental health programs are held accountable for the alleviation of these problems, personal satisfaction is a focal point for administrators, legislators, and the public as well as clients and clinicians. Thus, personal satisfaction is a useful research criterion for assessing mental health and evaluating mental health programs (Bigelow, Brodsky, Stewart, & Olson, 1980).

It is the opinion of this author that personal satisfaction, how one feels, is often, but not necessarily connected to how one behaves. For the purposes of research, behavior is most useful in defining mental illness and evaluating change. Thus, a second research criterion for assessing mental illness is behavioral aberration from norms, averages, and accepted social expectations.

A third perspective for looking at "quality of life" research is social adaptation. This perspective emphasizes the adjustment between an individual and his/her environment.

Combining these three perspectives, personal satisfaction, behavioral aberration from norms, and social adaptation leads to the concept of "quality of life" as a condition of the individual and which identifies environmental variables that

are functionally related to those characteristics of the individual. Thus, "quality of life" is a concept of an individual participating in an environment.

The quality of an individual's life comprises: (a) general happiness or satisfaction of his or her needs and (b) performance or actualization of his or her abilities. The actualization of abilities is intrinsically motivating but is also important because of the functional relationship of the individual to the environment (Beiser, 1974).

The environment offers opportunities through which the individual may satisfy his or her needs (Campbell, Converse, & Rogers, 1976). In addition to material opportunities (food, housing money) social opportunities are available - friendship, work, parenting, etc. For example, parenting is an opportunity to associate with children, to obtain esteem and to exercise power. An individual can use work as an opportunity to find and relate to friends, and as a way of actualizing some personal abilities.

The environment also presents demands. Performance requirements are attached to each opportunity offered. For example, in the parent role, one must protect, nurture, teach. In the work role, one must produce, withstand stress, concentrate. Individuals meet these performance requirements by using cognitive, affective, behavioral and perceptual abilities (Campbell, Converse, & Rogers, 1976).

Thus, as outlined above, we have a system in which (1) it is demanded that an individual perform using his or her abilities, and (2) it is provided that an individual will have opportunities to have his or her needs satisfied. To the extent that adequate satisfaction and performance are achieved, the individual is said to be adjusted to the environment and to enjoy a good quality of life (Campbell, Converse, & Rogers, 1976).

It is this author's belief that an underlying assumption of the "theory of quality of life" is the positive correlation between quality of life and degree of normalization. Therefore, an individual residing in the community, be it in a group home, boarding room, foster care, etc., is participating in a more normalized environment and inherently enjoys a higher quality of life than an institutionalized person. Thus in assessing quality of life, the absence of "negative outcomes", i.e., hospitalization, incarceration, acts as a measuring device as well.

The "Oregon Quality of Life Questionnaire" (OQLQ) includes both satisfaction and performance items for each scale. There are four groups of scales: personal adjustment, interpersonal adjustment, adjustment to productivity, and civil adjustment. The instrument also includes items which yield retrospective client opinions about the impact of treatment on specific aspects of their 'quality of life', and the contribution of

program and extraneous factors to the resolution of their problems. These specific items will be explored for their qualitative value in this study.

The expectation of this research is that the sample respondents will demonstrate a variety of outcomes, with an over-all adequate adjustment rate. No direct correlations can be made between the quality of life (outcome) of the sample population and involvement in the Adolescent Support Program (treatment). However, it would seem reasonable, should the hypothesis prove valid, that the results indicate that the treatment was not detrimental to the sample and may, in fact, be an appropriate alternative to psychiatric hospitalization or other more restrictive settings.

Research Question IV: What is the model profile of students attending the Adolescent Support Program?

A goal of this exploratory research is to determine those factors of client member respondents which seem to represent the profile of a model student of the Adolescent Support Program.

Based on literature review and investigator interest, a list of potential characteristics, (independent variables) was developed. The potential list, in conjunction with a brief description of the intent of this study, was evaluated by an "in-house-jury" of five members. The list of variables was then

modified according to suggestions of the "in-house-jury". The data was subsequently gathered through record review and personal interview of the sample population.

The following is a list of the independent variables which will be reported individually in the appropriate section of Chapter IV:

1. Age at entry to program
2. Length of stay in program
3. Gender
4. Socio-economic level
5. Intelligence quotient
6. Hospital days
7. Degree of pathology
8. Additional agency involvement

The data will be analyzed for frequency distributions and measures of central tendency for each independent variable. Academic achievement will not be included as an independent variable. This is due to the vast variety in measurement tools used to assess academic achievement and the variety of conditions under which subjects' academic achievement was assessed. General academic performance and school involvement is included in the delineation of groups for the degree of pathology variable.

Research Question V: Which student background characteristics predict outcome?

An attempt will be made to relate the background characteristics (independent variables) to outcomes.

Background data will be coded numerically and tied to numerical values of outcome by way of regression analysis. The objective is to determine which, if any, background characteristics show a high correlation with outcomes and therefore may be important predictors of outcome.

Summary

In summary, the research design proposed above will attempt to answer the research questions from a variety of perspectives as summarized in the table on the following two pages.

All of the data collected for this proposed design will be obtained by record review and personal interview using the "Oregon Quality of Life Questionnaire". Each method of data collection will complement others, and the various perspectives will provide a multi-faceted exploration of an alternative treatment program for psychotic and borderline psychotic adolescents.

Data analysis will be carried out by the author/investigator and will focus on defining and interpreting emergent themes and trends as presented by the data.

Definition of Terms

Specific terms used in this research proposal are defined as follows:

Entry Age - calculated by subtracting date of birth from date of entry into the Adolescent Support Program. Date of entry is established by the signing of an Individual Education Plan by all necessary parties. Age is rounded off to the nearest month using the 15th day of the month as the midpoint.

Entry Grade - based on Legal Education Agency records.

Length of stay - total number of months enrolled in the Adolescent Support Program. This includes those days for which outreach services were provided, but not those for which follow-up services were provided. Number of days are rounded off to the nearest month.

Gender - Sample population respondents will be coded:

0 - male
1 - female

Socio-economic level- Based on and grouped according to family eligibility for the free lunch program as determined by the Pittsfield Public Schools.

Coding - 1 - those sample respondents who are eligible for free lunch

2 - those sample respondents who are eligible for reduced lunch

3 - those sample respondents not eligible for reduced or free lunch.

Intelligent quotient - the full-scale score on the most recently administered Wechsler Intelligence Scale for Children - Revised (WISC-R) or Wechsler Adult Intelligent Scale (WAIS)

Hospital days - total number of days spent in an in-patient psychiatric hospital or a psychiatric ward in a general hospital

Degree of Pathology - Member clients have been grouped into four categories, based on their histories, involvement with agencies, behavioral characteristics, and scholastic functioning.

Group I: Severely and chronically emotionally disturbed clients

This group is comprised of chronically mentally ill adolescents; their extensive dysfunction includes paranoia, psychosis, severe withdrawal, schizoid personality and depression. They have a history of recent psychiatric hospitalization of three months or more and/or repeated inpatient episodes. They have little or no impulse control and may be dangerous to

themselves and others. They have a record of extensive involvement with the social welfare system including more than one out-of-home placement.

Scholastic performance is substantially below grade level expectations as determined by norm-referenced achievement testing. They are presently unable to attend regular school. Emotional disturbance interferes substantially with learning ability.

Group II: Short-term emotional illness

This group is comprised of severely emotionally disturbed adolescents primarily with a diagnosis of adolescent adjustment reactions, depression, suicidal gestures and paranoia. The condition has lasted for a minimum of six months. Short-term psychiatric hospitalization (less than thirty days in the past year) may have occurred. Out-of-home placements and other social service involvement may have been necessary. These clients are able to use community services in a limited way.

Scholastic performance is substantially below grade level expectations. Ability to concentrate and motivation are impaired.

Group III. Recurring psychiatric and violent episodes

This group is comprised of adolescents whose mental health needs are manifested through behaviors such as substance abuse, destructiveness, and assault. They are known to the mental health system through family involvement and are often identified very early by school personnel. They may have a history of short-term psychiatric hospitalization. They have commonly been involved with the juvenile justice system/social services, and may have entered the DMH system via Department of Social Services (DSS) or Department of Youth Services (DYS). These adolescents demonstrate little or no impulse control and can be dangerous to themselves and others.

Scholastic performance is substantially below grade level expectations. School attendance has been sporadic. Acting-out behavior interferes with school performance.

These adolescents are dependent on services to provide management due to their limited functioning.

Group IV: Acute emotional crisis

This group is comprised of adolescents who are experiencing an acute emotional crisis. These

clients, whose usual functioning would be substantially higher, are experiencing a sharp decrease in the very recent past. Previous psychiatric hospitalization is rare, but out-of-home placements may have occurred. These youth have generally had previous involvement in therapeutic out-patient services, families may have participated as well. These adolescents have experienced a loss of impulse control, are disruptive, acutely depressed and/or suicidal. A characteristic of this group is erratic emotional behavior, while social and educational functioning is more stable.

Additional agency involvement - concurrent services received by sample respondents from other adolescent/youth providers in the community while enrolled in the Adolescent Support Program; i.e.- Department of Social Services, Department of Youth Services, Juvenile Probation, Key Inc., Meridian Associates, Berkshire Mental Health. Each additional, concurrent agency involvement will be given a numerical value of 1 and be accumulative.

0 = no additional agency involvement

1 = 1 additional agency involvement

2 = 2 additional agency involvements

3 = 3 additional agency involvements

etc.

Sample respondents - Those eligible client members of the Adolescent Support Program who participate in this research proposal. Two possibilities for eligibility as a sample respondent exist:

1) enrolled in the program for a minimum of nine consecutive months between September 1980 - December 1986, or

2) currently enrolled in the program.

The total number of eligible client members equals 43.

Adolescent Support Program (ASP) - a day-treatment program for identified psychotic adolescents and adolescents with borderline psychotic conditions between the ages of 13-22 who reside in Berkshire County. ASP is jointly funded and administered by the Pittsfield Public Schools and Department of Mental health. Services offered include: outreach, special education, vocational training, individual, group, family, milieu and network therapy, recreation, and follow-up.

RESEARCH DESIGN SUMMARY

Research Questions	Goals	Methods
1. How has the frequency and duration of psychiatric hospitalization changed for Berkshire County adolescents between 1976 and 1986?	1. To measure and compare number of hospitalizations and lengths of stay of Berkshire County adolescents annually since 1979	1 (a) Collect data from Department of Mental Health Records on psychiatric hospitalization of clients since 1979 (b) Calculate frequency distributions, measures of central tendency (c) Plot findings
2. Does involvement in the Adolescent Support Program influence the number of hospitalizations and lengths of stay for client members?	2 To measure and compare number of hospital days of client members before and after attending the Adolescent Support Program for a minimum of 9 months	2 (a) Collect data via record review (b) Calculate measures of central tendency, before and after placement (c) Plot findings
3. What is the outcome, as measured by the Oregon Quality of Life Questionnaire, on average, of involvement in the Adolescent Support Program on client members?	3 To measure the quality of life of each sample member	3 (a) Administration of the Oregon Quality of Life Questionnaire (b) Calculation of frequency distributions, measures of central tendency and and percentages of respondents (c) Comparison of results regarding time out of program (d) Plot findings
4. What is the model profile of students attending the Adolescent Support Program?	4 To establish those characteristics most representative of the Adolescent Support Program student	4 (a) Establish list of pertinent factors (b) Submit factors to in-house jury (c) Modify list of pertinent factors (d) Collect data via record review and and personal interview (e) Using MINITAB analyze data for frequency distribution, measures of central tendency (f) Plot findings
5 Which student background characteristics predict outcome?	5 To measure the relationship between specific sample characteristics and the quality of life experienced by client members	5 (a) Using data previously collected calculate correlation coefficients for each variable (b) Calculate covariance using regression analysis (c) Plot findings

CHAPTER IV

RESULTS

Introduction

Based on the research design presented in Chapter III, results will be presented in five sections. Any alterations which may have been made in the research design, in response to problems raised during implementation, are noted within the appropriate section. The major content of each section is as follows:

Section One:	Berkshire County adolescent psychiatric hospitalizations. 1976-1986
Section Two:	Psychiatric hospitalizations of client members before and after involvement in the Adolescent Support Program
Section Three:	Oregon Quality of Life Questionnaires Results
Section Four:	Profile of the model member of the Adolescent Support Program
Section Five:	Relationship between variables of client members and their quality of life.

As necessary, each section is subdivided to present information clearly.

Section One: Berkshire County Adolescent Hospitalizations 1976-1986

Research Question #1: How has the frequency and duration of psychiatric hospitalization changed for Berkshire County adolescents between 1976 and 1986?

The Population:

In order to answer the research question, "What is the relationship between the Adolescent Support Program and the frequency of psychiatric hospitalizations of Berkshire County adolescents?" it is necessary to investigate both the Berkshire County Adolescent group and the client member group of the Adolescent Support Program. Section One focuses on the former, Section Two on the latter. Comparisons will follow Section Two.

For the sake of clarity, for the duration of this chapter, the Berkshire County adolescent population will be referred to as the B.C. Group and the Adolescent Support program client member group will be referred to as Group A.

Members of the B.C. Group are defined as identified State Department of Mental Health (DMH) adolescent clients. For the purposes of this study, in order to be included in Group BC, an individual must meet the following criteria:

1) reside in Berkshire County;

2) be between the ages of 13 and 22 in the time frame 1976-1986;

3) have a history of psychiatric hospitalization.

Group BC includes only those DMH Berkshire County adolescents who have been psychiatrically hospitalized for a minimum of one day. Excluded are Berkshire County adolescents who have been exclusively serviced by or placed in alternative settings such as residential treatment centers, out-patient clinics or other programs. The rationale for this exclusion is based on the assumption that the psychotic and borderline psychotic patient is typically treated, at least partially, in a hospital setting. As this is the population under study, hospitalization is a key factor in attempting to match relevancy of the groups.

In addition to excluding DMH cases who have not been hospitalized, adolescents who have been treated in psychiatric hospitals but are not DMH clients are excluded. The rationale for this exclusion is simply a matter of not having access to that information. Private placements are not recorded by any central agency.

Also excluded from Group BC are the 43 members of Group A. Group A is defined as: All Berkshire County adolescents between the ages of 13 and 22 who have been enrolled in the Adolescent Support Program for either a minimum of nine

months or who are currently enrolled in the program. Members of Group A are DMH clients, but not all members of Group A have a history of hospitalization. The concept of deinstitutionalization is the underlying foundation of this discrepancy as participation in the program was selected as a less restrictive placement alternative to hospitalization for these members.

Data Collection

Permission to access the records of DMH clients was received with three stipulations: 1) no identifying information could be used: 2) records would stay in place; and 3) only admission and length of stay data, would be extracted. These stipulations were met.

The record keeping system at the Area Office of the DMH is divided into three categories: active, inactive, and deceased. Files are not separated by age categories. Therefore, all files were investigated. Inactive files preceding 1976 had been destroyed, and the accuracy of all record keeping prior to 1978 is questionable according to the Keeper of the Records of the Area Office.

Each file was screened. Dates of hospitalizations were matched with the age of the client at admission and the corresponding year. All clients who fit the formula of having been admitted to a psychiatric hospital between 1976 and 1986 and who were between the ages of 13 and 22 at the

time of admission were entered in the data collection of this study.

Records were not entirely clear. Some cases showed no date of birth or age data. Some cases did not include dates of admission and/or discharge. Due to the stipulated agreement with DMH, no verification or elucidation of this information was possible. Therefore, the data included in this section of this study may not be a completely inclusive, accurate accounting, as it is based entirely on the record keeping of the Department of Mental Health. Any record which did not provide all the necessary information was excluded.

Data collected for the BC Group includes:

1) numbers of psychiatric hospital admissions
2) age at each admission
3) year of admission
4) length of stay
5) gender of members

Although some admissions exceed 365 days, they are counted as one admission and are attributed to the year of admission only.

Data Findings

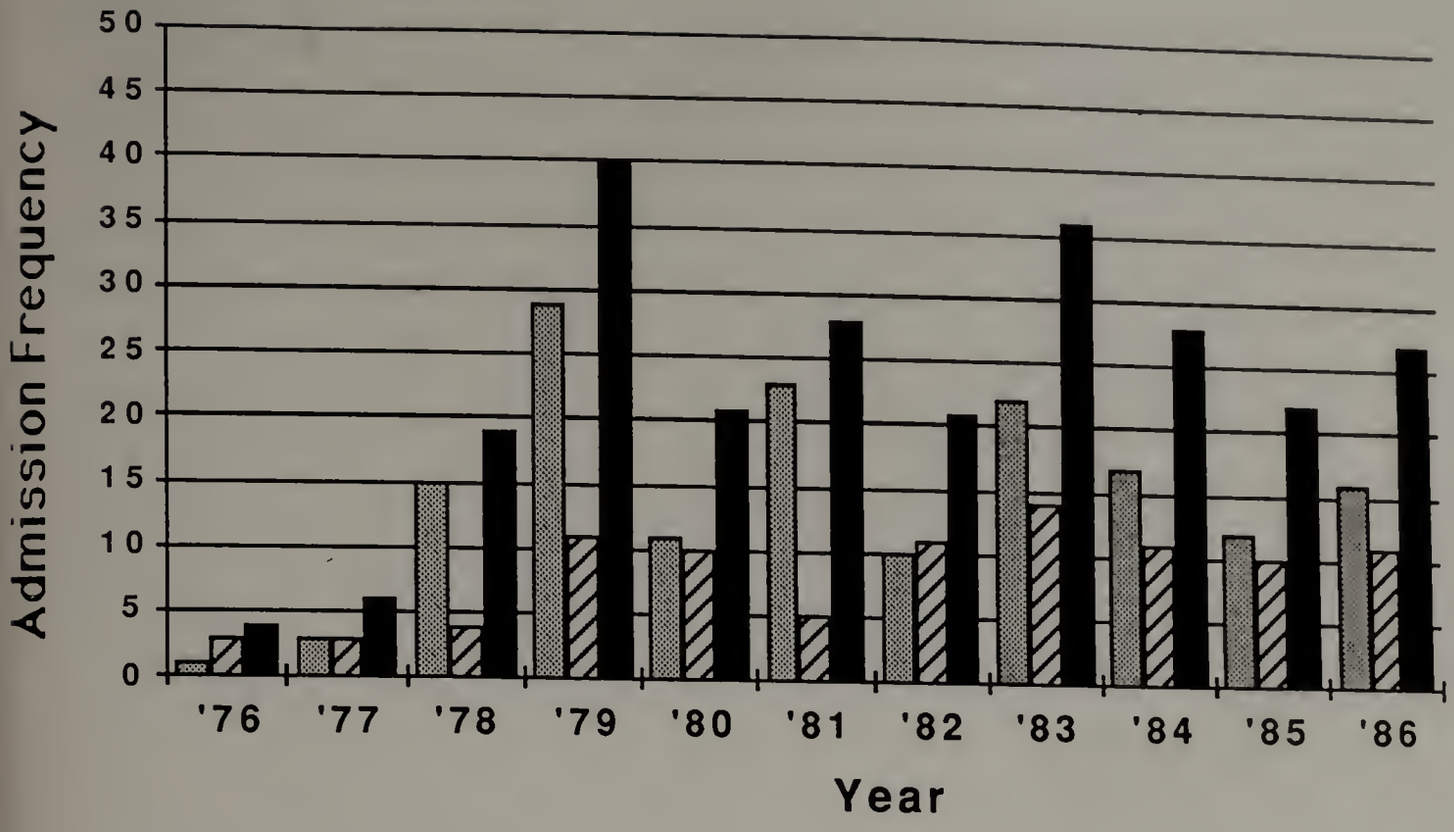
Department of Mental Health records indicate 136 people being hospitalized that meet the criteria for inclusion in the BC Group of this study. Findings concerning these 136 members are organized according to the preceding five variables.

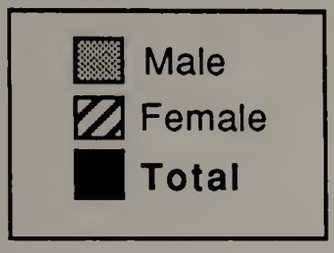
1. Numbers of psychiatric hospital admissions The total number of psychiatric hospital admissions equals 253 for the BC Group. Of these 253 admissions, 159 represent male members and 94 represent female members.

As Graph 1-1 illustrates, 1979 represents the largest number of admissions (40) within the time frame being presented. As stated previously, records preceding 1978 may not be accurate, thus the substantial increase of 1979 may represent the beginning of accurate record keeping as much as an increase in admissions.

1980 shows a 47.5% decrease in hospital admissions over 1979. Rising by 25% in 1981, the number of admissions is still 30% less than 1979. Returning to an equal number of admissions as 1980, 1982 declines by 25% to 21 admissions. An increase of 41.6% occurs in 1983 with a total of 36 admissions, still 10% less than 1979. In 1984, 28 admissions represents a decline of 22.22% from the preceding year and is followed by a further decline of 21.43% in 1985. The 27 admissions in 1986 means an increase of 22.72%.

Thus, in terms of number of admissions, there are less adolescent admissions since 1979's record high. Unfortunately, data preceding 1979 is unreliable, and therefore not helpful in establishing a better pattern of admissions prior to the creation of the Adolescent Support Program. With the exception of one year, a range of 47.5% to 30% fewer admissions exists since the creation of the





Year	Male	Female	Total
1976	1	3	4
1977	3	3	6
1978	15	4	19
1979	29	11	40
1980	11	10	21
1981	23	5	28
1982	10	11	21
1983	22	14	36
1984	17	11	28
1985	12	10	22
1986	16	11	27

Graph 1-1

Annual Hospital Admissions 1976-1986

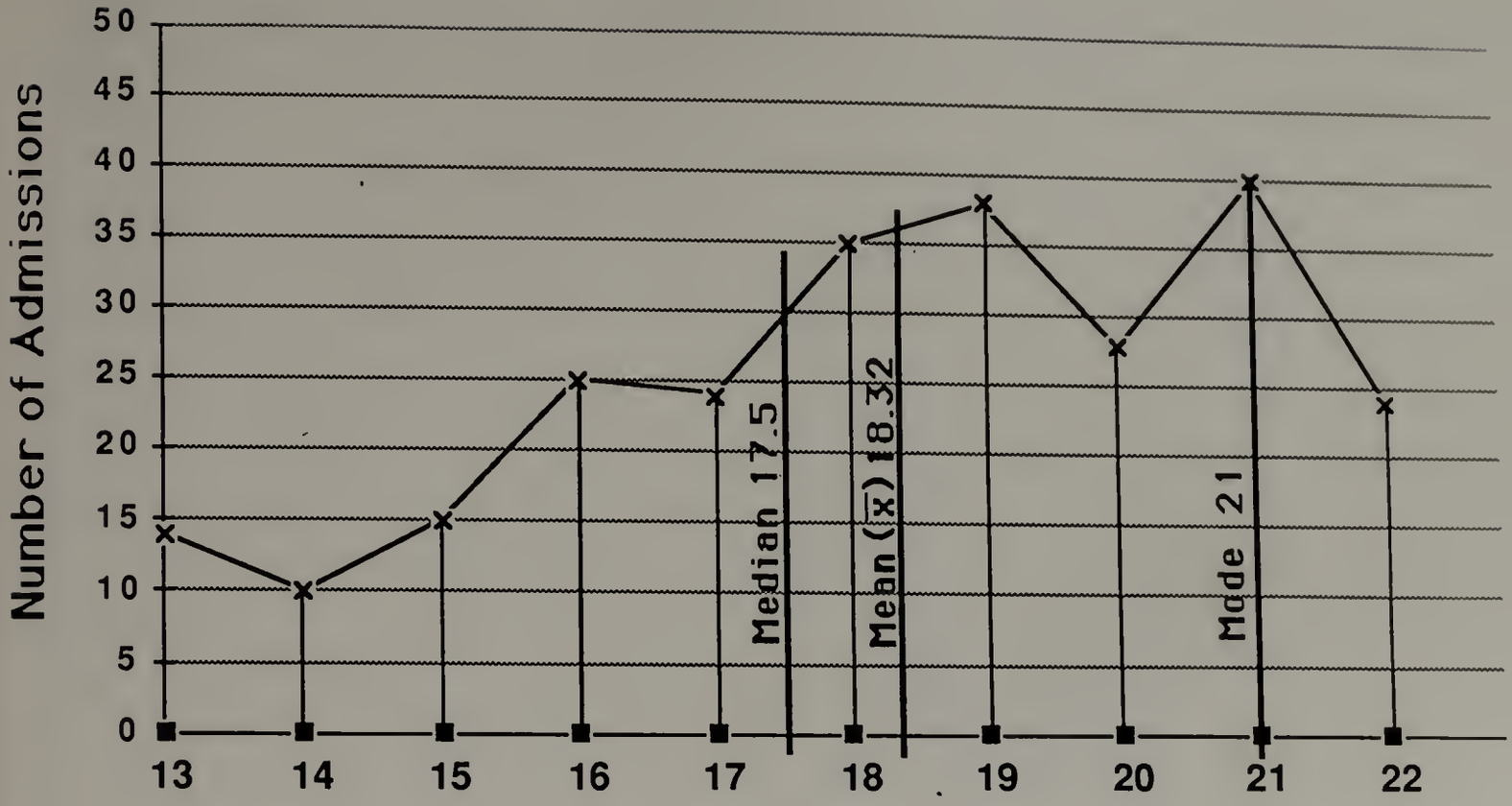
Adolescent Support Program and even that exception is 10% less than 1979. The actual range of diminished numbers of admissions is 4-19 in the seven years subsequent to 1979.

Thus, it may be summarized that the frequency of psychiatric hospitalizations did decline for this population at a time commensurate with the creation of the ASP. Although no evidence has been established to conclude a relationship in these events, it is possible that the creation of the ASP is one factor at least partially linked to this decline in hospitalization frequency.

2. Age at Admission

The mean age at admission is 18.32. The mode age at admission is 21. The median age is 17.5. These measures of central tendency are for the total admissions between 1976-1986 as illustrated by Graph 1-2. As shown, fourteen year olds were admitted least often with the frequency for 13 ands 15 year olds following. Clearly, admissions increased substantially (40% more) with the 16 year old group, and remained at least 36% higher than the 15 year old group for the remaining ages.

The following table is a breakdown of admissions according to age. Also presented are the total number of days hospitalized and the mean length of stay for each age group.



Median = 17.5
Mean = 18.32
Mode = 21

Ages	# of Admissions
13	14
14	10
15	15
16	25
17	24
18	35
19	38
20	28
21	40
22	24

Graph 1-2

Admission Frequency- Age Grouping
BC Group

Table 1- Age Group Admission Records

Age Group	Number of Admissions	Number of Days	Mean Length of Stay
13	14	1938	138.43
14	10	1044	104.40
15	15	1773	118.20
16	25	1589	63.56
17	24	1654	68.92
18	35	3516	100.46
19	38	2465	64.87
20	28	2456	87.71
21	40	1517	37.93
22	24	2145	89.38

The thirteen and fifteen year old groups rank ninth and eighth respectively in numbers of hospital admissions. In terms of mean lengths of stay, they rank first and second. Fourteen year olds rank tenth in admission and third in mean length of stay. This indicates a negative correlation relationship for the younger adolescent group. Taken as a group, the 13, 14, and 15 year olds rank highest in mean length of stay and lowest in number of admissions. Furthermore, the twenty-one year old group had the most admissions, and the shortest mean length of stay, a second negative relationship.

The eighteen year old group ranks third in number of admissions (35) and fourth in mean length of stay (100.46). Eighteen year olds accumulated the largest number of actual days hospitalized, 3516. This is 1,051 days more than the nineteen year old group (the second highest group) with 2,465 total number of days hospitalized.

The older adolescent - 16-22 year olds - in the BC Group was admitted to psychiatric hospitals more frequently but spent less time in the hospital than the younger (13-15 year old) groups on the average. Of the total 253 admissions, 9 exceeded one year in duration. Of this, 9, 4 (44%) are from the younger adolescent group.

Recidivism

Fifty-seven members of the BC Group experienced more than one hospitalization. This represents 41.91% of the total BC Group. The older members of the BC Group were admitted more frequently in general. Likewise, the older adolescent group experiences more frequent first admissions. With a range of 2 to 19 multiple admissions, eighteen year olds ranked highest with 11. Ordered in decelerating order, the ranking is as follows:

Table 2 - Age at First Admission

Age at first admittance	Number of multiple admissions
18	11
16	8
19	8
21	8
17	7
13	6
15	6
20	3
14	2
22	1

Thus it would seem that those admitted for the first time as 16, 17, 18, 19, and 21 year olds had the highest rate of recidivism in this group. Perhaps it can be concluded that

for the BC Group, early intervention appears to contribute to a reduction in the rate of recidivism during the 1976-1986 time period.

3. Year of Admission

Graph I illustrates the actual number of admissions according to the year of admittance. This description also includes the variables of age and length of stay (which is represented by total number of days) and is organized by year. Members are grouped according to age categories.

1976 - Of the four admissions in 1976, one was fifteen, one was seventeen, one was nineteen , and one was twenty-two. Each of these is a distinct member, without recidivism within the year. One member had a readmission in a subsequent year.

Table 3 - 1976

Number of Members	Number of Admissions	Age Group	Total Days
1	1	15	77
1	1	17	573
1	1	19	30
1	1	22	10

The mean length of stay in 1976 is 172.5 days. As mentioned previously, the data from 1976 is not reliable due to poor record keeping systems within Area Office I of the Department of Mental Health at that time.

1977 - There are six hospital admissions recorded in 1977, each representing a distinct member of the Population. Four of these members experienced later readmissions. 1977 records are not reliable in terms of complete information according to DMH officials.

Table 4 - 1977

Number of Members	Number of Admissions	Age Group	Total Days
1	1	15	300
1	1	15	395
1	1	16	115
1	1	17	42
1	1	18	140
1	1	19	54

1978 - Nineteen admissions occurred in 1978 amongst the BC Group. These nineteen admissions represent 14 distinct members. Of the 14, 4 experienced one admission in an earlier year. Two members each experienced 3 separate admissions within 1978. Two members were again admitted in a later year. Nine members of the BC Group experienced a first admission in 1978, 5 of which are solitary admissions.

Table 5 - 1978

Number of Members	Number of Admissions	Age Group	Total Days
2	2	13	742
1	1	14	640
1	2	15	19
1	1	16	20
1	1	17	59
2	2	18	2555
2	4	19	72
1	1	20	4
1	1	21	251
2	4	22	187

1979 - Of the forty admissions in 1979, thirty-five represent distinct members of the BC group. In addition to the five members having multiple admissions within 1979, five had had an earlier admittance and six experienced later admissions. Thus, thirty members of the BC Group experienced first admissions in 1979, 19 of which are solitary admissions.

Table 6 - 1979

Number of Members	Number of Admissions	Age Group	Total Days
2	3	13	929
1	1	14	14
1	1	15	11
5	6	16	316
2	2	17	66
5	5	18	184
7	7	19	416
6	7	20	238
3	5	21	70
3	3	22	82

1980 - Twenty-one hospital admissions occurred in 1980. Fourteen of these twenty-one represent distinct members of the BC Group. Of the multiple admissions, one was admitted 4 separate times within the year, one was admitted three times within the year, and two were admitted twice within 1980. Although fourteen members were admitted in 1980, two had previous admissions and five would experience later admissions. Therefore, for seven members, 1980 was the year of the only admission and for twelve, 1980 was the year of

first admission. In 1980, there were no admissions of thirteen and fourteen year olds.

Table 7 - 1980

Number of Members	Number of Admissions	Age Group	Total Days
0	0	13	0
0	0	14	0
1	1	15	20
2	2	16	32
2	5	17	313
1	2	18	65
2	2	19	116
3	3	20	1099
2	3	21	49
1	3	22	60

1981 - Twenty-eight admissions occurred amongst the BC Group in 1981. This is represented by 20 distinct members. Within 1981, seven members experienced multiple admissions; six were admitted twice, one was admitted three times. Also, of the twenty members admitted, eight had had a previous admissions, and half of these would experience a later admission as well. Three additional members were also readmitted at later dates. Thus, out of the twenty-eight admissions, only six were isolated events, fourteen were or would be recidivists.

Table 8 - 1981

Number of Members	Number of Admissions	Age Group	Total Days
1	2	13	25
0	0	14	0
1	1	15	180
3	3	16	151
1	2	17	90
5	8	18	230
1	1	19	82
2	4	20	157
4	5	21	73
2	2	22	293

1982 - There were twenty-one admissions in 1982 amongst the BC Group. Seventeen of these admissions are distinct members. Two members experienced two admissions within the year, one member being admitted three times within 1982. Amongst the repeating individuals eight experienced earlier admissions, three of these eight also experienced later admissions. One additional members was readmitted later. Thus, six members experienced a single hospitalization.

Table 9 - 1982

Number of Members	Number of Admissions	Age Group	Total Days
2	2	13	9
2	2	14	88
0	0	15	0
3	5	16	669
2	2	17	73
0	0	18	0
2	2	19	106
1	1	20	691
1	3	21	19
4	4	22	555

1983 - There were thirty-six admissions in 1983. Twenty-seven distinct members of the BC Group were admitted. One member was admitted six separate times within 1983, four others were each admitted twice within the year. Of the twenty-seven eleven experienced later admissions and seven experienced earlier admissions. Eleven members hospitalized in 1983 did not experience either previous or subsequent admissions.

Table 10 - 1983

Number of Members	Number of Admissions	Age Group	Total Days
2	2	13	89
3	3	14	73
2	2	15	40
2	2	16	17
0	0	17	0
6	7	18	219
5	5	19	581
* 3	6	20	62
* 3	6	21	40
2	3	22	605

1984 - Twenty-eight admissions occurred in 1984 amongst the BC Group. Only three of these admissions wee members who did not have additional admissions, either within 1984, or previously, or subsequently. Sixteen distinct members of the Group were admitted in 1984. Of the multiple admissions, two experienced dual admissions, two experienced three admissions each, two experienced four admissions each, all within 1984. Nine members admitted in 1984 had had at least

one previous admission. Two of these also had subsequent admissions as did one additional member.

Table 11 - 1984

Number of Members	Number of Admissions	Age Group	Total Days
1	2	13	54
2	2	14	158
1	1	15	240
1	1	16	19
1	4	17	194
1	4	18	24
3	4	19	334
0	0	20	0
4	8	21	604
2	2	22	150

1985 - During 1985, there were twenty-two total admissions within the BC Group. Fifteen of these were distinct members. Of those fifteen BC Group members, three had no additional admissions. Of the multiple admissions within 1985, four members were each admitted twice, one member had four admissions within the year. Two members experienced both previous and subsequent admissions, four members had only previous admissions, and two were re-admitted in subsequent years.

Table 12 - 1985

Number of Members	Number of Admissions	Age Group	Total Days
0	0	13	0
0	0	14	0
2	3	15	434
* 1	1	16	51
* 1	2	17	161
4	4	18	84
* 2	4	19	528
* 4	4	20	145
3	4	21	329
0	0	22	0

1986 - In the final year under study, twenty-seven admissions took place within the BC Group. Twenty-two of these are distinct members. Of the twenty-two members admitted in 1986, three had previous histories of admissions. Three members were re-admitted once within 1986, and one member was re-admitted twice within the year. Fourteen members experienced a single admission.

Table 13 - 1986

Number of Members	Number of Admissions	Age Group	Total Days
1	1	13	90
1	1	14	71
1	1	15	57
* 3	3	16	199
* 3	4	17	83
1	2	18	15
5	6	19	139
1	2	20	60
5	5	21	82
2	2	22	203

* Members hospitalized within one year, but at different ages within the year. Therefore, appears as one extra distinct member in charts, but is, in fact, the same member.

4. Length of Stay

Length of Stay is defined as number of days spent in psychiatric hospitalization. The minimum length of stay is one day, the maximum length of stay for a single admission in the BC Group is 2,189 days. The mean length of stay per admission over the ten-year period is 79.43 days. The mean length of stay per distinct group members is 147.77 days. For the remainder of this section, the mean lengths of stay will

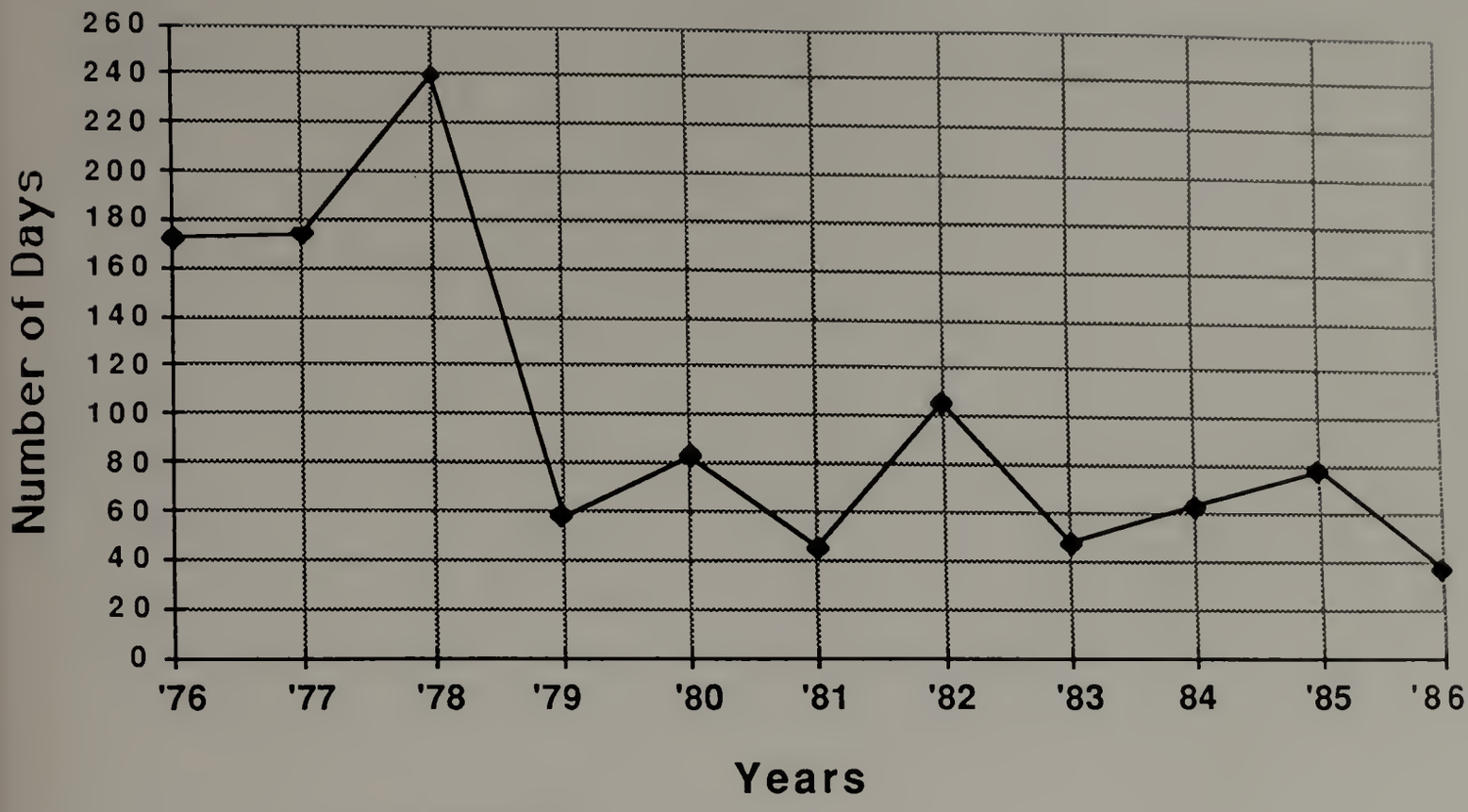
be based on number of admissions and not distinct members of the group. This is done for the sake of organization as several group members have multiple admissions at varying ages and during several years.

The mode for length of stay for BC Group admissions is 30 days. The median length of stay is 25 days.

As mean length of stay according to age has been presented previously in this section (age at admission - Table I) the data is presented here according to years.

As illustrated in Graph 1-3, there is a substantial decline in mean lengths of stay after 1978's high score. This is supportive of the expectation presented in Chapter 3, specifically, that the creation of the Adolescent Support Program would reduce the time spent in psychiatric hospitals by Berkshire County adolescents. As previously stated, the records of 1976 and 1977 are unreliable. Therefore, it is possible that an even larger discrepancy would exist between the years prior to 1980 and subsequent years.

The following table ranks the total mean lengths of stay in ascending order by year. The data is organized by mean length of stay per age groups within a year.



Year	# of Days
1976	172.50
1977	174.33
1978	239.42
1979	58.15
1980	83.20
1981	45.75
1982	105.23
1983	47.94
1984	63.46
1985	78.73
1986	37.00

Graph 1-3

Annual Mean Lengths of Stay: 1976-1986
BC Group

Table 14 - Mean Length of Stay

AGE						
13	90.0	12.50	44.50	309.67	27	0
14	71.0	0	24.33	0	79	0
15	57.0	180.0	20.0	0	240	144.6
16	66.33	50.33	8.5	52.67	19	51.0
17	20.75	45.0	0	33.00	48.5	80.50
18	7.5	28.75	31.29	36.80	6	21.0
19	23.17	82.0	116.20	59.43	83.5	29.66
20	30.0	39.25	10.3	34.00	0	36.25
21	16.40	14.60	6.67	14.00	75.5	153.60
22	101.50	146.50	201.67	27.33	75.0	0
Total	37.00	45.75	47.94	58.15	63.46	78.73
	1986	1981	1983	1979	1984	1985

13	0	4.5	0	0	371.0
14	0	44.0	0	0	640.0
15	20.0	0	77.0	347.5	9.5
16	16.0	133.80	0	115.0	20.0
17	62.60	36.50	573.0	42.0	59.0
18	32.5	0	0	140.0	1277.50
19	58.0	53.0	30.0	54.0	18.0
20	366.33	691.0	0	0	4.0
21	16.33	6.33	0	0	251.0
22	20.0	138.75	10.0	0	46.75
Total	83.2	105.23	172.5	174.33	239.42
	1980	1982	1976	1977	1978

Graph 1-4 illustrates the mean length of stay for the BC Group organized by age at admission.

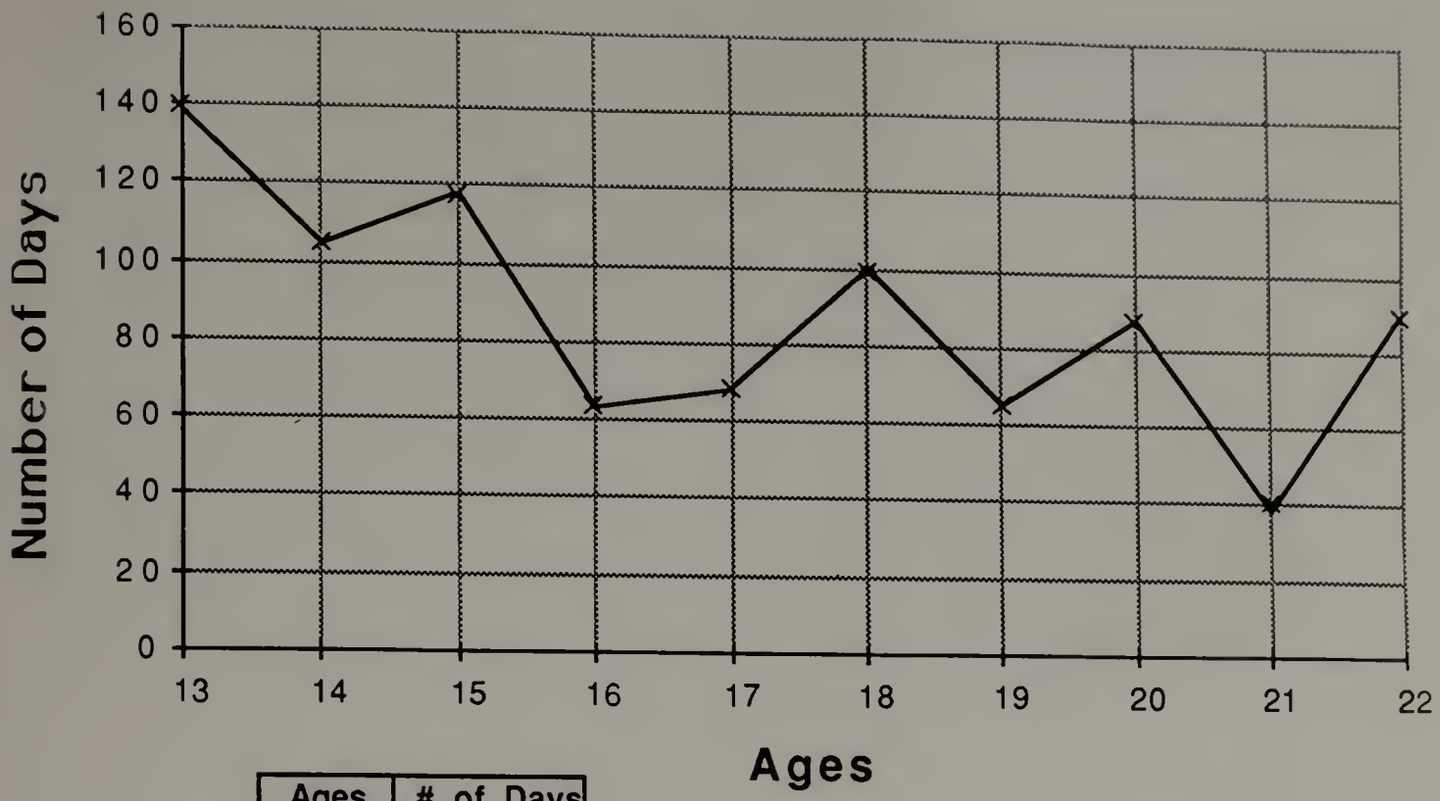
Graph 1-5 illustrates the mean length of stay for the BC Group organized by year and differentiated according to sex. This will be discussed in the section on gender of members.

5. Gender of Members

During the period from 1976-1986, 253 admissions occurred amongst the BC Group. 159 (62.84%) of these admissions were male members, 94 females (37.16%). As shown in Graph 1, male admissions surpassed female admissions in 8 of the 11 years. Female admissions outnumbered males in 1976 and 1982. The number of admissions in 1977 for the BC Group are equally distributed for males and females.

In terms of distinct BC Group members, the total population is 136. Thirty-five point 29% of the group are females, 64.71% are males. Therefore, it is evident that recidivism is approximately equal for both genders as there is less than a 2% difference between actual group member admissions and total admissions according to gender.

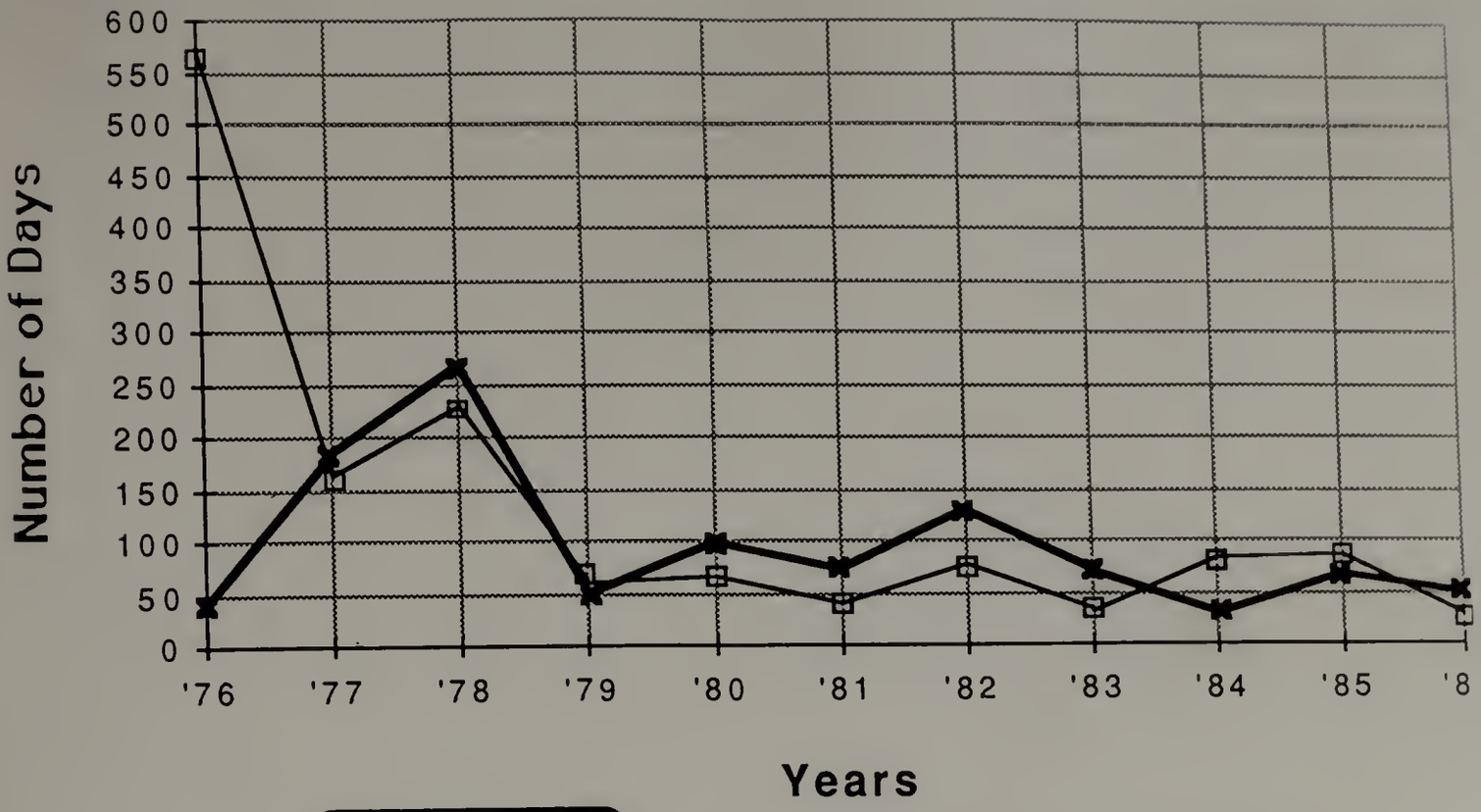
Interestingly, the picture is quite different in terms of the relationship between gender and mean length of stay. Female length of stay surpassed that of males in 1977, 1978, 1980, 1981, 1982, 1983, and 1986 - a total of 7 years. This is illustrated in Graph 1-5.



Ages	# of Days
13	138.43
14	104.40
15	118.20
16	63.56
17	68.92
18	100.46
19	64.87
20	87.71
21	37.93
22	89.38

Graph 1-4

Mean Lengths of Stay
Age Groupings
BC Group



Year	Male	Female
1976	573.00	39.00
1977	164.60	184.00
1978	231.53	269.00
1979	60.52	51.91
1980	68.00	100.60
1981	39.78	73.20
1982	77.70	130.27
1983	33.23	71.07
1984	85.24	29.82
1985	88.00	67.60
1986	28.50	49.36

Graph 1-5

Annual Mean Lengths of Stay
Gender
BC Group

In general, the mean length of stay over the entire eleven year period for females is 82.40 days. The mean length of stay for males for this period is 78.16, approximately a four-day difference which does not seem significant in and of itself. Yet when compared with the number of admissions, it becomes clear, that whereas male admissions outnumber female admissions for the BC Group by 26.20%, female lengths of stay surpass that of males, on average.

The final analysis of the BC Group looks at the relationship of gender and age for the total number of admissions.

Thirteen year olds account for fourteen admissions in the eleven year period. Thirty-five point 71% of these are female admissions, whereas 64.29% are male admissions.

Fourteen year olds account for ten admissions in the eleven year period. 60% of these are female admissions, whereas 40% are male admissions.

Fifteen year olds account for fifteen admissions in the time period. 40% of these are females, and 60% are males.

Sixteen year olds account for twenty-five admissions. 40% of these sixteen year olds are female, 60% are males.

Seventeen year olds account for twenty-four admissions between 1976-1986, 37.5% being female admissions, 62.50% being male admissions.

Eighteen year olds account for thirty-five total admissions. 31.43% of this number are female admissions and 68.57% are male admissions.

Nineteen year olds account for thirty-eight of the total admissions. 39.47% are female admissions, and 60.53% are male admissions.

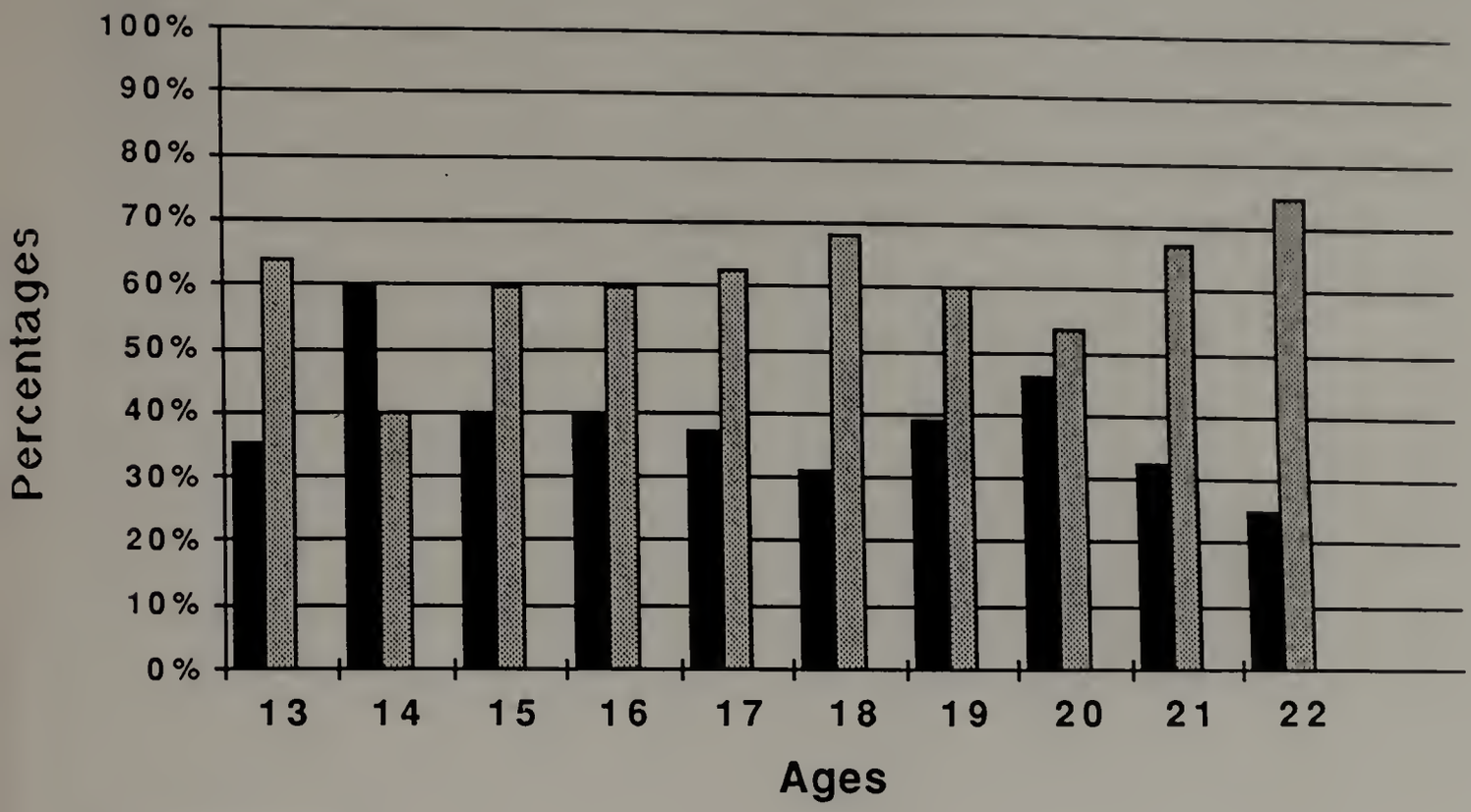
Twenty year olds account for twenty-eight of the total admissions. 46.43 of these are female admissions, 53.57 are male admissions.

Twenty-one year olds account for forty of the total admissions. 32.50% of these forty are female admissions, 67.50% are male admissions.

Twenty-two year olds account for twenty-four of the total admissions. 25% of these are female admissions, 75% are male admissions.

These percentages are represented in Graph 1-6.

Clearly, the percentages are fairly consistent for gender. Females have a range of 21.43% and males have a range of 35%. The only age at which the percentage of female admissions exceeded that of males is in the fourteen year old group. This is the age group with the least number of admissions for the total BC Group population, as well as the third highest ranking in mean length of stay. This is consistent with the previous findings that on average, females tend to be admitted less often and remain



Age	Female	Male
13	35.70%	64.29%
14	60.00%	40.00%
15	40.00%	60.00%
16	40.00%	60.00%
17	37.50%	62.50%
18	31.43%	68.57%
19	39.47%	60.53%
20	46.43%	53.57%
21	32.50%	67.50%
22	25.00%	75.00%

Graph 1-6

Admission Percentages
Age Groupings
BC Group

hospitalized for longer periods and that younger adolescents tend to have a similar pattern.

Summary - Section One

To summarize, between 1976-1986, a total of 253 admissions of the BC Group (n=136) occurred. Admissions diminished after 1979 for the total population. Younger members of BC Group seem to be admitted less frequently with a lower rate of recidivism, and longer lengths of stay. Female members of the BC Group tend to be admitted less often, with an approximately equal rate of recidivism as males, and tend to experience longer lengths of stay than their male counterparts. Length of stay, on average, has diminished since 1978, however, inconsistently.

Section Two - Psychiatric Hospitalization Histories of Group A

Research Question #2 Does involvement in the Adolescent Support Program influence the number of hospitalizations and lengths of stay for client members?

Introduction

It is the intent of this section to examine Group A in terms of frequency and duration of psychiatric hospitalization. It is expected that this section will establish a general picture of the degree of accomplishment of the Adolescent Support Program in reaching its primary goal - the reduction of frequency and duration of psychiatric hospitalization of Berkshire County adolescents.

Population

Group A consists of 43 members. Each member has either been enrolled in the ASP for a minimum of nine months or was, at the time of data collection for this work, enrolled in the program.

Only adolescents between 13 and 22 are eligible for enrollment in ASP; however entry and discharge are possible at any time within that time frame. Thus, data are presented by age but will have the added dimension of pre- and post-entry into ASP.

Data Collection

As this writer has been directly involved in the ASP since its inception, all members of Group A, their histories and

records are accessible without limitations. Information for this section was collected through ASP record files and personal interview and could be verified by DMH and School Department records. Therefore, all data collection is considered reliable.

Data Findings

Findings for Group A are organized according to:

1) numbers of psychiatric admissions
2) age at admissions
3) lengths of stay
4) gender

1. Psychiatric Admissions

Prior to entry in the ASP, 24 of the 43 members of Group A had been admitted to a psychiatric hospital for a minimum of one day, at least once. This constitutes 55.81 percent of the total group. Frequency of hospital admissions range from 0-4 prior to program entry.

Number of Members	Number of Hospital Admissions	
19	0)	
17	1)	
4	2)	Prior to ASP Placement
1	3)	
2	4)	
Total 43	36	

As indicated by the above table, the total number of hospital admissions - prior to entry - for Group A equals 36. The adjusted mean number of admissions equals 1.50. The mode equals 1, and the median is 2.0.

After entry in the ASP, the total number of hospital admissions for Group A is 15.

Number of Members	Number of Hospital Admissions	
32	0)	
9	1)	
1	2)	Post Entry to ASP
0	3)	
1	4	
Total 43	15	

As illustrated above, the adjusted mean for hospitalization admissions of Group A after entry equals 1.36. With a mode of 0, the range remains 0-4 as in the pre-placement sub-group.

The difference in number of admissions for Group A pre- and post-entry into ASP equals a 58.33% reduction.

Of the 15 hospital admissions which occurred after entry into the program, 14 occurred after discharge from the program. Thus, only one number of Group A (2%) was admitted to a psychiatric hospital while engaged in the program.

Additional analysis indicates that of the 14 hospital admissions occurring post discharge, there is a three-year range between discharge and hospital admissions.

Number of Members	Percent of Total	Number of Years Between Discharge & Hospital Admission*
4	9.30%	0 (less than 1 year)
2	4.65%	1
6	13.95%	2
2	4.65%	3
Total 14		

*Years are defined as the period between date of discharge and the anniversary of that date.)

Thus, for a total calculation - pre- and post-admissions equal 51 for Group A. On average, 1.19 hospital admissions per member.

2. Age at Admission to Psychiatric Hospital

Age at hospitalization is sub-divided into two categories: number of admissions, and lengths of stay. Each is presented with distinction to pre- and post-involvement in the ASP.

Thirteen Year Olds

A total of 5 hospital admissions occurred for this age group. Each one is a distinct member of the group. All of these admissions occurred prior to entry in the ASP.

A total of 809 days were spent as in-patients by 13-year olds, yielding a mean length of stay of 18.81 days, and an adjusted mean length of stay of 161.80 days. The adjusted range of lengths of stay is from 29-330 days.

Fourteen Year Olds

A total of 11 hospital admissions occurred for 14-year olds. Each admission is a distinct member of Group A and all occurred prior to entry in the ASP. Three of these members had had a previous admission.

A total of 1,726 days were spent in hospitals by these 11 members, thus yielding a mean length of stay of 40.14 and an adjusted mean of 156.90. The adjusted range of length of stay for this age group is 11-211 days.

Fifteen Year Olds

Eight hospital admissions are attributed to this age group. Again, each is represented by a distinct member, and occurred prior to program entry. Three of these members had experienced an earlier admission, one of which had experienced two previous admissions.

A total of 758 days were spent in hospitalization by 15-year old members of Group A. The mean length of stay for this population equals 17.63 days, the adjusted mean is 94.75 days. The range for 15-year olds is 25-209 days.

Sixteen Year Olds

Seven of the admissions of Group A are attributed to 16 year olds. Six of these were prior to ASP entry. Four of the seven were first admissions. Of the multiple admissions, one had had three priors, and two each had two previous admissions.

A total of 641 days were spent in hospitals by 16-year old members of Group A. The mean length of stay being 14.91, the adjusted mean length of stay equaling 91.57. The adjusted range for this group is from 24 to 277. Ninety of these days are attributed to the member who was hospitalized after entry to ASP and before discharge.

Seventeen Year Olds

Four members of Group A were hospitalized at this age. One member of this age group was hospitalized after entry to ASP. Fifty percent of these members had had previous admissions, fifty percent had none.

Ranging from 49 to 365 days, the total number of days being 604, the mean length of stay for 17-year olds is 14.05 days. The adjusted mean length of stay equals 151.0. One hundred twenty-seven of the days included in this group are attributed to the member admitted after program entry and discharge.

Eighteen Year Olds

Three admissions occurred in this age group, one of which was a first admission. All three were prior to program entry.

Totaling 159 days, the mean length of stay equals 3.70 days, the adjusted mean length of stay equals 53 days. The range of duration is from 17 to 120 for these three admissions.

Nineteen Year Olds

Five admissions occurred among 19-year old members of Group A. Four of these admissions proceeded entry into ASP. Three of the four were also the first admission for their perspective members. One of the 19-year old recidivists had had two prior admissions, the other admission had experienced one additional admission. Three hundred sixty days were accumulated in hospital settings amongst these admissions which ranged from 14 to 175 days. The mean length of stay equals 8.73 days. The adjusted mean length of stay equals 72 days.

Twenty-Year Olds

There were no hospital admissions among the twenty-year old members of Group A.

Twenty-One Year Olds

One admission occurred in this age group, after entry into ASP and lasting seven days. It was a first admission for the

member. The mean length of stay for this age group is .58 days, the adjusted mean length of stay is 7 days.

Twenty-Two Year Olds

Seven admissions occurred among this age group. All seven were after entry into ASP. Four distinct members of the Group experienced hospitalization, one member being admitted four times within the year. All four members had had previous admissions.

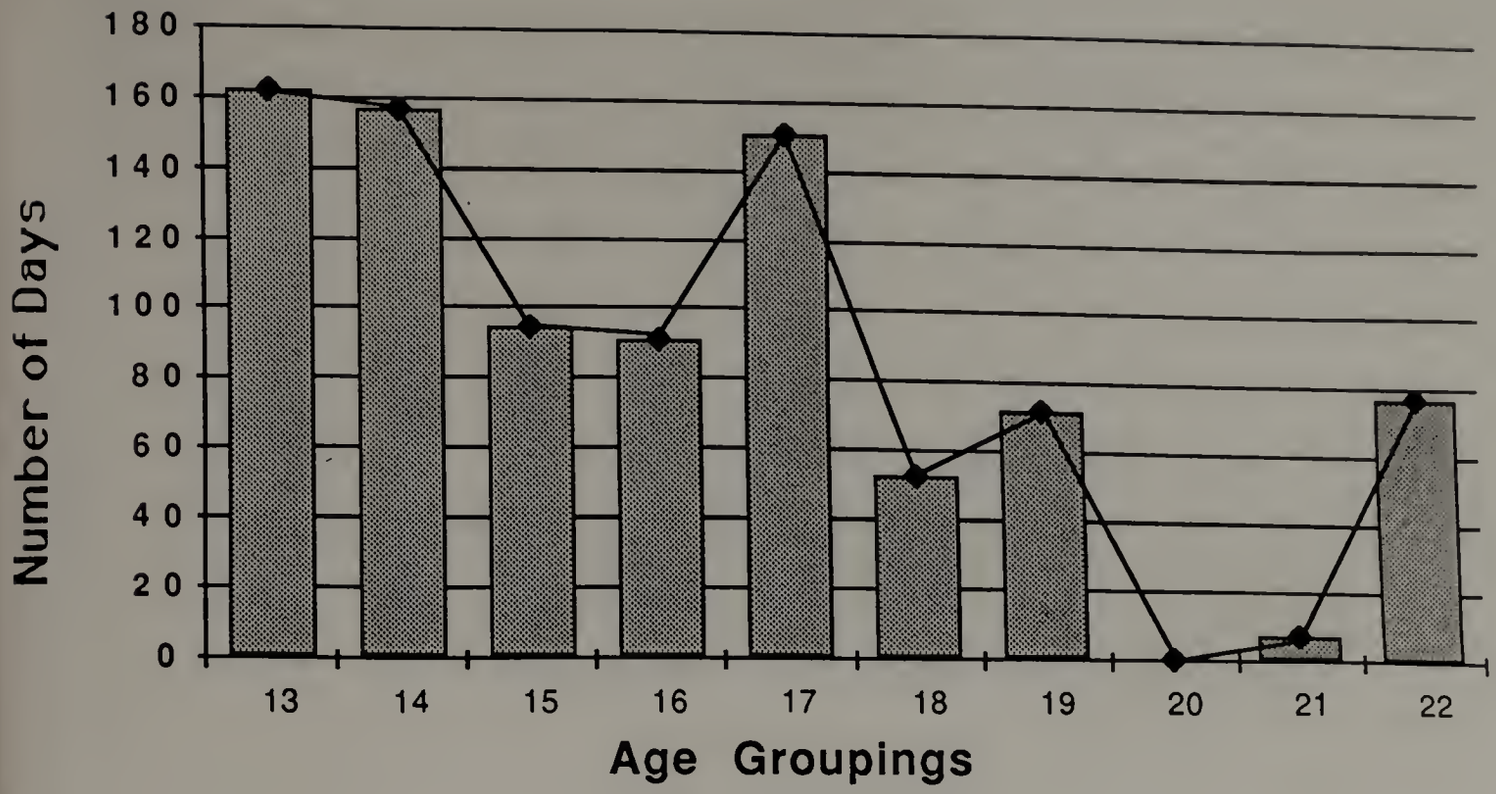
A total of 310 days were accrued in hospitals by 22-year old members of Group A. The mean length of stay for 22-year old members is 44.29, the adjusted mean length of stay equals 77.50.

The adjusted mean lengths of stay for age groups are illustrated in Graph 2-1. Frequency of admissions are illustrated in Graph 2-2.

In ascending order, the fourteen-year old group ranks first in number of admissions and in the total mean length of stay. It ranks second in adjusted mean length of stay. There appears to be a general decline in number of admissions from fourteen-year olds and a resurgence among the 22-year old group.

3. Length of Stay

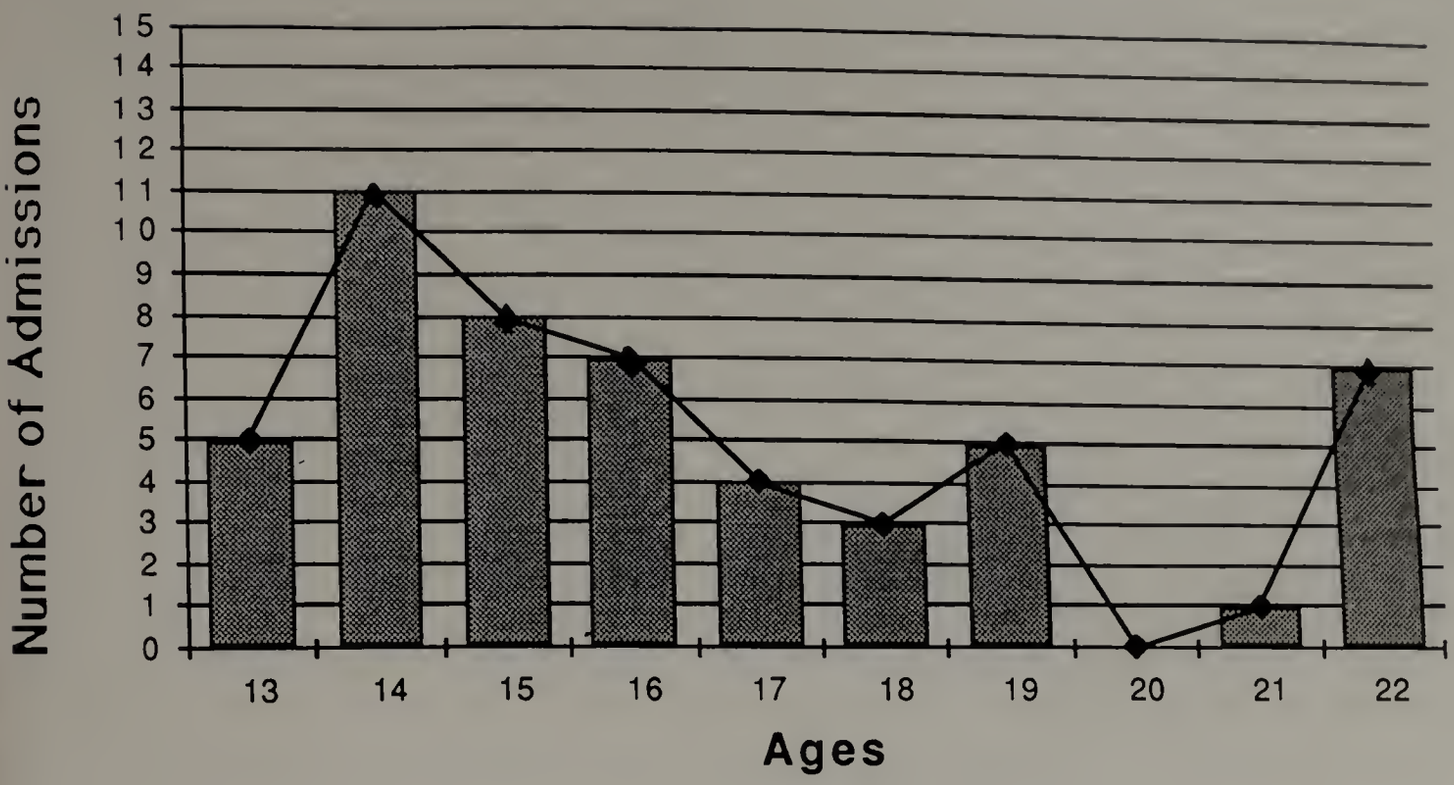
The length of stay for members of Group A has previously been presented by age groupings. In this sub-section, length



Age	# of Days
13	161.80
14	156.90
15	94.75
16	91.57
17	151.00
18	53.00
19	72.00
20	0.00
21	7.00
22	77.50

Graph 2-1

Adjusted Mean Length of Stay
Age Groupings
Group A



Age	# of Admissions
13	5
14	11
15	8
16	7
17	4
18	3
19	5
20	0
21	1
22	7

Graph 2-2

Admission Frequencies
Age Groupings
Group A

of stay is presented by distinct member. Material is presented according to days hospitalized:

1) before entry

2) after entry

3) after termination

As presented in Table 15, the total mean length of stay for Group A equals 104.19 days prior to entry in the ASP. The adjusted mean length of stay equals 189.67. The range for the hospitalized pre-entry group is 11 to 903 days. The figures represent a total accumulation of hospital days prior to entry.

After entering ASP but prior to discharge, only one 90-day admission occurred. Thus, in terms of the total group A, post-entry data, a mean length of stay of 2.09 days results. The adjusted mean length of stay equals 90 days.

The after-discharge data yields a mean of 18.70 and adjusted mean of 73.09 days hospitalized.

Fourteen members of Group A have zero days hospitalized. Five members of Group A have an accumulation of 307 days after discharge, with 0 days prior to entry. The adjusted mean length of stay for this sub-group being 61.4 days.

Table 15 - Group A Members Hospital Days

Client #	# days Pre-Entry	# days Post Entry	# days Post Discharge	Total Days
1	104	0	0	104
2	0	0	7	7 *

(continued on next page)

(continued from preceding page)

Client #	# days Pre-Entry	# days Post Entry	# days Post Discharge	Total Days	
3	0	0	90	90	*
4	496	0	0	496	
5	284	0	0	284	
6	31	0	0	31	
7	56	0	0	56	
8	176	0	60	236	
9	0	0	21	21	*
10	0	0	0	0	
11	25	0	0	25	
12	209	0	0	209	
13	71	0	100	171	*
14	903	0	--	903	
15	139	0	0	139	
16	29	0	0	29	
17	238	90	127	455	
18	412	0	0	412	
19	221	0	0	221	
20	24	0	--	24	
21	0	0	0	0	
22	0	0	0	0	
23	0	0	0	0	
24	0	0	0	0	
25	0	0	0	0	
26	11	0	0	11	
27	0	0	0	0	
28	273	0	180	453	
29	277	0	10	287	
30	17	0	0	17	
31	0	0	--	0	
32	0	0	0	0	
33	0	0	0	0	
34	0	0	14	14	*
35	113	0	--	113	
36	120	0	20	140	
37	25	0	0	25	
38	0	0	0	0	
39	0	0	0	0	
40	226	0	0	226	
41	0	0	0	0	
42	0	0	0	0	
43	0	0	175	175	*
Mean	104.19	2.09	18.70		
Adj Mean	189.67	90.	73.09		

* designate those members in which post-entry lengths of stay exceed pre-entry lengths of stay

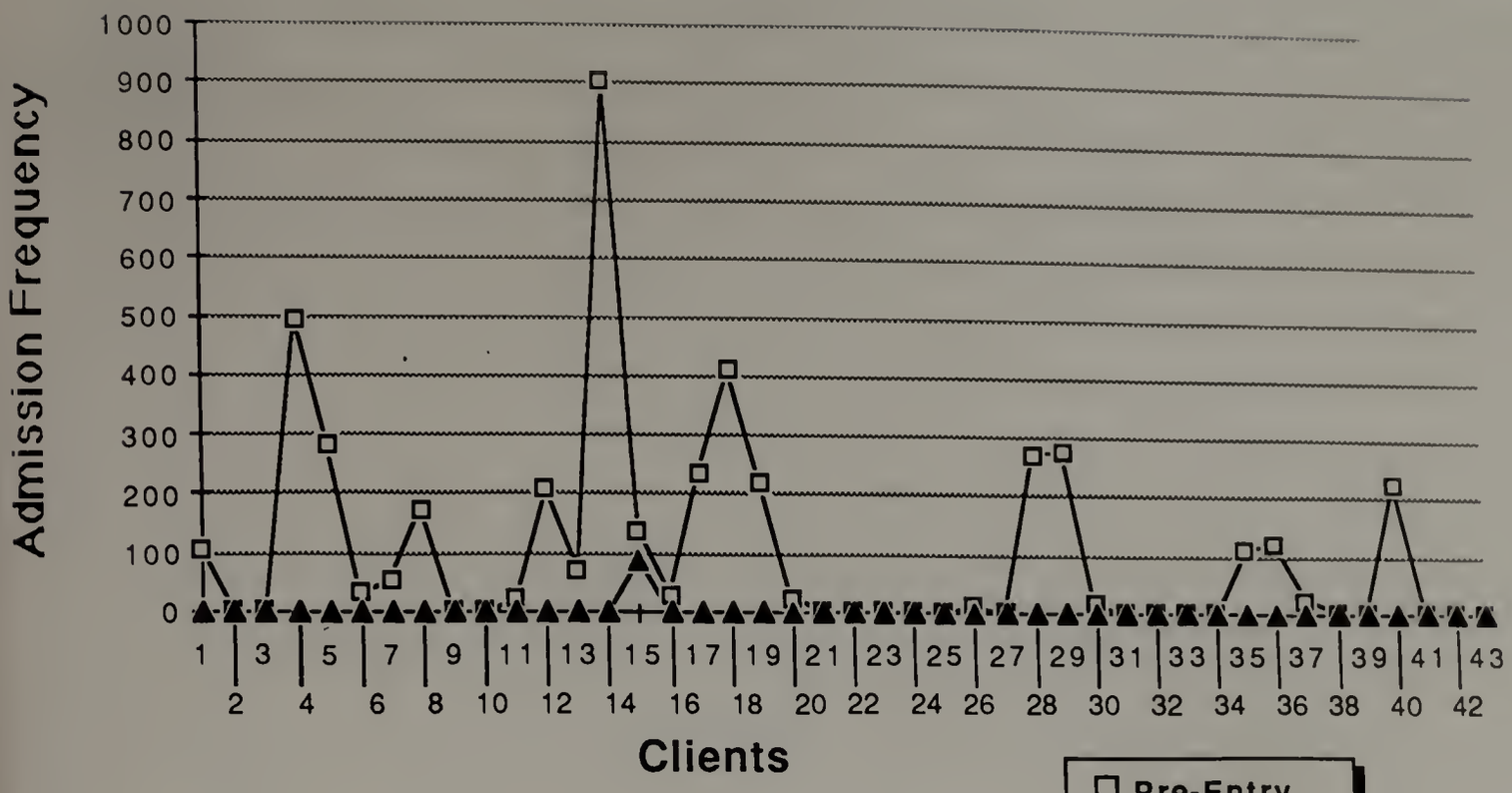
Graph 2-3 illustrates, by member, the difference, before and after program , in numbers of days hospitalized. For six members, after discharge days exceed pre-entry days. for 24 members pre-entry lengths of stay exceed post entry lengths of stay.

It seems clear that for the Group A population, hospital admissions and lengths of stay declined considerably, after entry into the program, as evidenced by a difference in adjusted means of 113.58 days, and an actual accumulated day difference of 3,586 days. The difference in number of admissions, pre- and post-entry equals 21. Thus, for this population within the time limits of this study, a substantial difference exists for hospitalizations before and after program involvement.

4. Gender

Admission frequencies - female members

46.50% of Group A are female members (20 members). 75% of these females had experienced at least one psychiatric hospitalization (15 members). With a total of 28 admissions, pre-program entry admissions outnumbered post-entry admissions by three times.



Client	Pre-Entry	Post-Entry
1	104	0
2	0	0
3	0	0
4	496	0
5	284	0
6	31	0
7	56	0
8	176	0
9	0	0
10	0	0
11	25	0
12	209	0
13	71	0
14	903	0
15	139	90
16	29	0
17	238	0
18	412	0
19	221	0
20	24	0
21	0	0
22	0	0
23	0	0

Client	Pre-Entry	Post-Entry
24	0	0
25	0	0
26	11	0
27	0	0
28	273	0
29	277	0
30	17	0
31	0	0
32	0	0
33	0	0
34	0	0
35	113	0
36	120	0
37	25	0
38	0	0
39	0	0
40	226	0
41	0	0
42	0	0
43	0	0

Graph 2-3

Annual Hospital Admissions 1976-1986

	Pre-Entry	Post-Entry	Total
Number of admissions	21	7	28
Percent of admissions	75%	25%	100%

Length of Stay - Female Members

Based on the frequency of admissions, the adjusted mean length of stay equals 111.68 days. Calculations on the total female population yields a mean length of stay of 156.35 days. 3,127 hospital days were accumulated by female members of Group A. 78.41% of these days were accumulated prior to entry in ASP. The adjusted mean length of stay prior to entry equals 116.76 days. The adjusted mean length of stay post-ASP entry equals 96.43 days. A difference in adjusted mean lengths of stay of 20.33 days and a 17.41% decline is evident. This is illustrated in Graph 2-7.

Admission frequencies - male members

The male population, 23 members of Group A, accounts for 53.50% of the total group. Of this 53.50%, 60.87% had experienced a minimum of one hospitalization. With a total of 24 admissions, pre-program entry admissions outnumbered post-entry admissions, two to one.

	Pre-Entry	Post-Entry	Total
Number of admissions	16	8	24
Percent of admissions	66.66%	33.33%	100%

A difference of 33.33% in pre- and post-entry admissions exists.

Nine male members of Group A were not hospitalized (39.13%). Thus, the mean number of admissions for the total male sub-group equals 1.04.

Length of Stay - Male Members

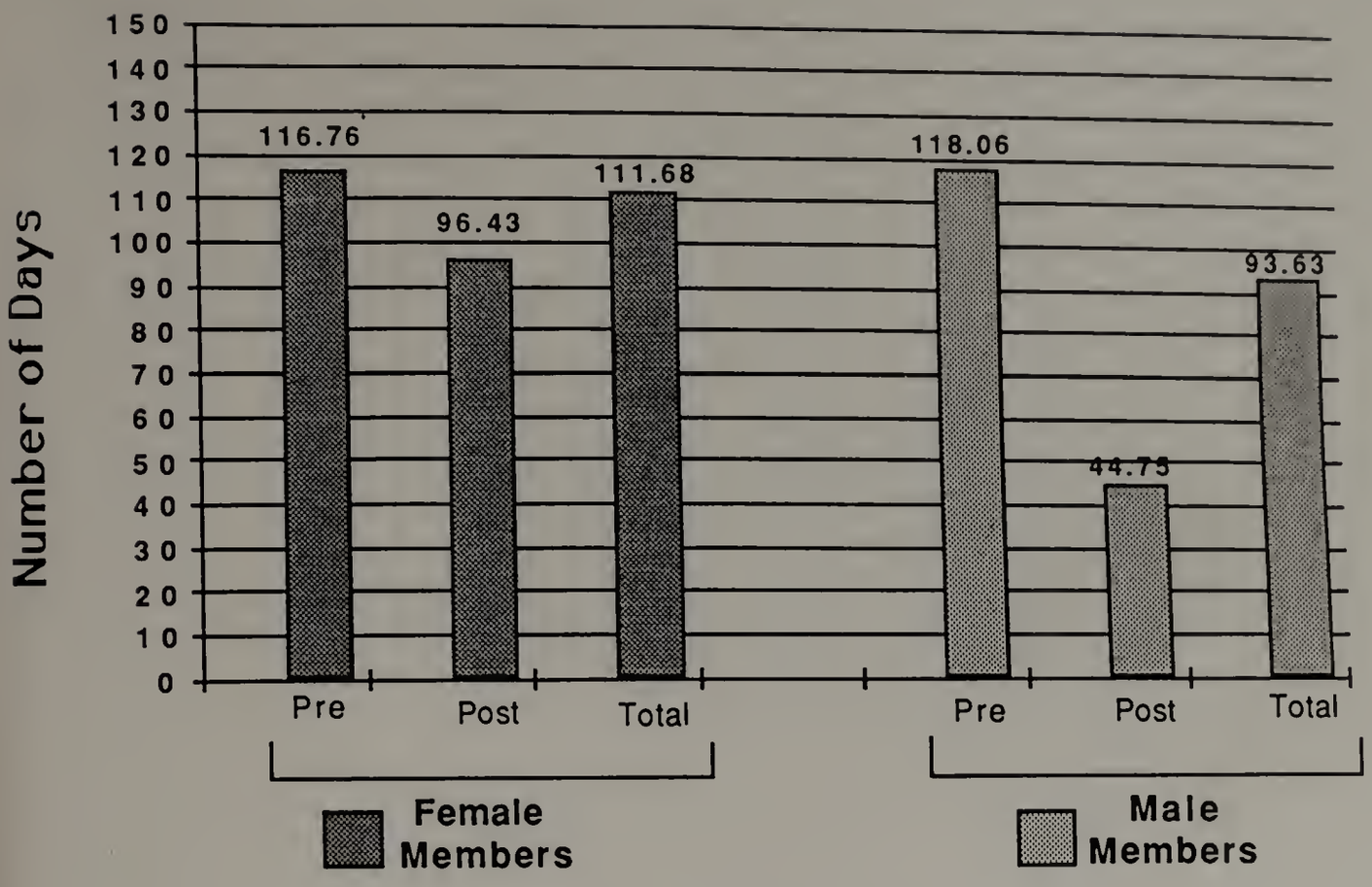
Based on the frequency of admissions, the adjusted mean length of stay for male members of Group A is 93.63 days. The mean length of stay based on the total male population is 97.70.

The total number of days accumulated in hospitals by male members of Group A is 2,247. 84.07% of these hospital days were accumulated prior to entry in ASP. The adjusted mean length of stay prior to entry in ASP equals 118.06. The adjusted mean length of stay post-entry equals 44.75 for male members. A difference in adjusted means of 73.31 days and a 68.14% decline. This is illustrated in Graph 2-4.

Gender Comparison Conclusions

Total female hospital admissions exceed total male admissions in Group A by 4, a 7.70% difference.

Female admissions prior to program entry exceed male admissions prior to program entry by 5, a 13.52% difference.



Graph 2-4

Adjusted Mean Length of Stay
Pre-Post Entry
Gender Grouping - Group A

The percentage of female admissions, per female population, exceed the percentage of male admissions, per male population, by 14.13%.

The mean number of admissions for female members exceeds the mean number of admissions of male members by a rate of .36, a 25% difference, in relation to the total Group population.

Male post-entry admissions exceed female post-entry admissions by one, a 6.67% difference.

Male members with 0 hospitalizations exceed female members with 0 hospitalizations by 4 members, a 14.13% difference.

Total adjusted mean length of stay for female members exceeds the total mean length of stay of male members by 18.05 days, a 16.16% difference.

Female adjusted mean length of stay - post-entry to ASP - exceeds male adjusted mean length of stay - post-entry - by 51.68 days, a 53.60% difference in adjusted means.

Male adjusted mean length of stay exceeds that of females in the pre-entry category by 1.3 days, a 1.1% difference.

The difference between pre- and post-entry mean lengths of stay for females is exceeded by that of males by 52.96 days. This is a 44.68% difference.

These comparisons of data by gender are demonstrated in Table 16. It seems evident that there are some gender distinctions. Female members of Group A have experienced more hospitalizations and tend to remain hospitalized for longer periods. This is evident in every category except two - hospital admissions post-program entry, and pre-program adjusted mean length of stay. In the first of these categories, the percentage of admissions per gender population indicates less than 1% difference, and is therefore considered insignificant. In the second, the difference is slightly over 1% - again not a significant difference. Thus, across the board females approximately equal or exceed males in the rate and frequency of psychiatric hospitalization in Group A.

The gender distinction of most interest to this study is the percentage of decline in mean lengths of stay pre- and post-program entry. Although both males and females show a substantial decline in hospitalizations after involvement in the ASP, males appear to experience a much more significant difference (68.14%). It would seem, from this data, that the Adolescent Support Program has therefore been more successful in reaching its primary goals with male members of the population; that is, males seem to benefit from the program more than females.

Table No. 16 - Gender Comparisons - Group A

	Female	Male	% Difference
1. Total rate of hospital admissions	28	24	7.70%
2. Pre-program rate of hospital admissions	21	16	13.52%
3. Post-program rate of hospital admissions	7	8	6.67%
4. 0 hospital admissions	5	9	14.13%
5. % admissions @ gender population	75%	60.887%	14.13%
6. Mean rate of admissions	1.40	1.04	25%
7. Adjusted mean length of stay - total (days)	111.68	93.63	16.16%
8. Adjusted mean length of stay (pre-program)	116.76	118.06	1.1%
9. Adjusted mean length of stay (post-program)	96.43	44.75	53.60%
10. % decline in mean lengths of stay (pre- and post-program)	17.41%	68.14%	44.68%

Section Two Summary

Will involvement in the Adolescent Support Program reduce number of hospitalizations and lengths of stay for client members?

The answer to Research Question 2 appears, on average, to be yes. Although it is not the intent of this study to present a cause and effect relationship, there does appear to be a decline in admission frequencies and lengths of stay, on average, for this population after program entry.

Prior to entry in ASP, a total number of 36 hospital admissions occurred in Group A. After entry in ASP. a total of 15 admissions occurred, a 58.33% reduction.

Prior to entry in ASP a total of 4,480 days were spent in psychiatric hospitals by Group A. The total number of days spent in psychiatric hospitals after entrance in ASP by Group A (within the time lines of this study) equals 894, a 3,586 total day difference. This represents a 66.73% difference in total days hospitalized.

It is important to note that of the hospital admissions occurring post-entry, all but one were also post discharge from the program. As the ASP and Group A members are young, one must qualify these findings. As time continues beyond this study's time constraints, admissions for Group A may continue to accrue. Of the fourteen admissions occurring post program discharge, four occurred within that year, two occurred after one year, six after two years and two after three years. Zero occurred after four and five years. Thus, there does not appear to be a corresponding pattern in re-admissions and time-after-discharge at this point in time, but more time needs to lapse to verify these findings.

Section Three - Oregon Quality of Life Questionnaire Results

Introduction

It is the purpose of Section Three to present the outcome, on average, of members of Group A. For this study, outcome is defined by quality of life. In Section Two, the frequency and duration of psychiatric hospitalization was presented for Group A. The absence of negative outcomes, such as hospitalization, is a commonly accepted measure of quality of life. Nevertheless, it is only one aspect of this concept. In this section, the following categories of quality of life will be explored with relation to Group A:

1. Personal Adjustment
    a. psychological distress
    b. tolerance of distress
    c. basic need satisfaction
    d. independence
2. Interpersonal Adjustment
    a. friendship
    b. close friendship
    c. social support
3. Productivity
    a. employment
    b. education
    c. other productive activities
4. Civic Adjustment
    a. legal
    b. alcohol
    c. drug
5. Overall Adjustment

In addition to these aspects of current life for Group A. this section will explore the impact of the Adolescent Support Program as perceived by the members of Group A.

As described in Chapter III, the Oregon Quality of Life Questionnaire is the tool used to ascertain the information pertaining to this section. Its reliability and validity have been established as adequate and as it was designed specifically for a mental health client population and to measure the effectiveness of community mental health programs, it is appropriate to this study.

Nevertheless, modifications in the questionnaire were necessary. Sections which were not relevant to an adolescent population were omitted. These included questions regarding marriage and child care. Also, the section regarding use of community resources was omitted as it did not pertain to the Pittsfield community. Additional items within sections were omitted because they did not apply to the ASP. Administration modifications have been presented in Chapter III. Because of these modifications, no direct measurements of the program's effectiveness are intended. Rather, the results are intended to point in the general direction of appropriateness of the program as an alternative treatment plan.

Results of the Oregon Quality of Life Questionnaire are presented in categories as outlined. Measures of central tendency are based on the number of items in each section and

the total number of possible responses. In addition to those responses specified by the questionnaire, a non-response is also possible. All 'zero' responses are accounted for by adjusting the measures of central tendency accordingly.

Several of the questionnaire items are more meaningfully presented in terms of percentages and will therefore be presented in those terms.

The items of particular interest to this study are presented individually as well as a part of the appropriate category discussion.

Population

Group A has been defined previously. Of the 43 members of Group A, 37 were interviewed using the Oregon Quality of Life Questionnaire. Thus, for this section, results are based on a reduced sample. Although all members were intended to be included, two were unable to be reached within the time limitations of this study, three were unable to participate because of parental interference, and one was unavailable due to a hospitalization beyond traveling distance, and no telephone accessibility.

Data Collection

All 37 responding members of Group A were interviewed personally by this writer. An initial phone conversation or in-person meeting introduced the concept of being interviewed, and established the confidentiality of the

process. All respondents participated on a voluntary basis. Interviews were arranged by mutual convenience and occurred in a wide variety of settings.

Findings

1. Personal Adjustment

Psychological Distress

Based on 23 items, the questions pertaining to distress deal specifically with how the responding member of Group A had been feeling during the week immediately preceding the interview. Both pleasant and unpleasant feelings are included. Response choices were re-coded for consistency.

Results indicate that on the average, Group A members were not presenting a significant degree of distress at the time of the interview. All actual scores fall within the first three quartiles of possible scores. All measures of central tendency place below the 50th percentile of possible scores and appear to be relatively consistent.

Table 17 - Psychological Distress - Measures of Central Tendency

R	=	70
Mo	=	46
Mdn	=	51
X	=	51.297

As demonstrated by Table 17, a slightly positively skewed distribution of scores exists.

Thus, based on the data collected concerning the degree of psychological distress from responding members of Group A, it

can be concluded that, on average, they were not at the time of interview, severely distressed.

Regarding specific feelings, some interesting data was attained on individual items within the distress category. For example, 51% of respondents reported feeling restless often or all the time. The second most prevalent unpleasant feelings identified by respondents were anger and pre-occupation with 48.6% reporting experiencing these often or all the time. The feeling of tension, anxiety was reported as being very prevalent by 40.5% of the members. Depression and confusion were reported experienced by more than 30% of the members more often than sometimes. The unpleasant feelings of fear and stigma were the least frequently reported emotions in the "often to all the time" choice categories. These frequencies are presented in Table 18 in descending order.

Table 18 - Psychological Distress Response Frequencies

	"often"	"all the time"	Total
Restlessness	27.0%	24.3%	51.3%
Anger	40.5%	8.1%	48.5%
Preoccupation	16.2%	32.4%	48.6%
Tension/anxiety	32.4%	8.1%	40.5%
Depression	27.0%	10.8%	37.8%
Confusion	21.6%	10.8%	32.4%
Fear	18.9%	5.4%	24.3%
Stigma	16.2%	5.4%	21.6%

The data presented in the psychological distress category is based on the underlying assumption that members of Group A can recognize and identify feelings. This is not necessarily correct. In fact, the ability to recognize and identify feelings is one of the major goals established for

most members of Group A by professionals working with them in implementing treatment plans. It is the experience of this writer after extensive work with this population that group members, in fact, are often not skilled in independently recognizing their feelings. For example, pervasive feelings of sadness and depression are often identified by Group A members as boredom. Thus it is possible that a variety of feelings may have existed of which the respondents were unaware.

Program Impact on Psychological Distress

Twenty-four point 3% of Group A report that ASP "greatly improved" the way they feel. An additional 59.5% report that ASP "improved" the way they feel. Thus, for 83.8% of the population, ASP is perceived as having a positive impact on feelings. Of the remaining 16.2%, 13.5% report that ASP has had no effect on psychological distress and 2.7% (one member) reports that ASP "made it worse".

All measures of central tendency for this item fall within the first quartile and are very consistent.

Coping Skills

The assumption that everyone at some point in time experiences bad or unpleasant feelings introduces the section of questions relevant to coping skills. The questions aim at establishing the level of difficulty respondents have recently experienced in managing unpleasant feelings. Four unpleasant feelings are addressed: depression, frustration, fear, and general upsetness.

On the average, responding members of Group A experience "some difficulty" coping with the above mentioned feelings. The data in this category is very consistent, on average. With a range of eight, a normal distribution is almost present, with all measures of central tendency placing close to or on the midpoint of the range.

Table 19 - Coping - Measures of Central Tendency

R = 8
Mo = 8
Mdn = 8
X = 7.97

The mode and median are on the 50th percentile of the range. The mean is .03 off the midpoint.

Regarding specific items, the feeling ranking first in terms of difficulty in coping appears to be frustration. Second is feelings of upsetness, following by depression and, finally, fear.

Table 20 - Coping - Response Frequencies

Feeling	% of response "some difficulty"	% of response " great difficulty"	% Total
Frustration	64.9%	24.3%	89.2%
Upsetedness	51.4%	29.7%	81.1%
Depression	51.4%	18.9%	70.3%
Fear	45.9%	13.5%	59.4%

It is most interesting that coping skills correspond with the unpleasant feelings which are most closely related in the Psychological Distress category of questions. For example, frustration is a form of anger which ranks second in most prevalent unpleasant feelings. As stated, 48.6% of Group A experienced considerable anger in the recent past. 89.2% of

Group A reported substantial difficulty coping with a form of anger. Ranked second in coping difficulties is upsetedness. This corresponds with anxiety, tension in the unpleasant feeling category. Ranking third in both categories is depression and difficulty coping with depression. Finally, fear seems to be experienced less and easier to cope with than others. Although there isn't a corresponding coping question for each unpleasant feeling question, the ones that do correspond have matching ranking. It would seem reasonable that the most prevalent unpleasant feelings are also the more difficult ones with which to cope.

Program Impact on Coping Skills

Twenty-seven percent of respondents report that the ASP "greatly improved" their management of unpleasant feelings. An additional 48.6% members of Group A report that ASP "improved" coping skills. 24.3% of the Group report "no effect". Zero respondents report a negative impact. Therefore, 75.7% of the responding members report some degree of improvement, a positive impact. Although a considerable degree of difficulty coping with unpleasant feelings is reported, it seems that there is nevertheless an improvement.

Basic Needs Satisfaction

The third component of Personal Adjustment pertains to current living situation, income, transportation, and medical care. The intent is to ascertain members' level of satisfaction regarding these basic needs. Each will be

presented separately after the analysis of general level of satisfaction with basic needs as a whole.

With a possible range of 19, the measures of central tendency all fall within the second quartile. Due to a couple of high scores, the frequency distribution is positively skewed. Therefore, the mean is less accurate as an indicator of satisfaction. Although the measures of central tendency are relatively close, the median, in this case, appears to be most typical of the level of satisfaction regarding basic needs as reported by Group A.

Table 21 - Basic Needs Satisfaction - Measures of Central Tendency

R	=	19
Mo	=	14
Mdn	=	15.688
X	=	16.178
S.D.	=	2.537

It seems that on the average, responding members of Group A are satisfied with the level at which their basic needs are being met.

Living Situation - Seventy-nine point 75% of respondents report satisfaction with their home, both in terms of its physical and intangible attributes. It would appear that the Adolescent Support Program has had "no effect", on average, regarding this basic need. With only 35.1% reporting improvement related to ASP interventions, 59.5% of respondents report "no effect". Two respondents report impact as having a worsening effect in this area. It seems that generally Group A members are satisfied with their

homes, and this satisfaction is not related to participation in ASP.

Income - Sixty-four point 9% of respondents report adequate or better satisfaction with their incomes. 67.6% of respondents report that ASP has had "no effect" on this basic need. The conclusion that on the average, respondents' satisfaction with their present incomes is unrelated to participation in the Adolescent Support Program seems unreasonable. ASP's vocational component employs many of the respondents and has arranged private sector employment for several of the discharged members. Nevertheless, as perceived by respondents, the ASP has not impacted upon present income satisfaction.

Transportation - Ninety-one point 9% of respondents report a satisfactory level of ease in being able to navigate their environment. Seventy-eight point 4% of respondents report that ASP has had "no effect" on this basic need. The interesting piece of data in this item is that three respondents (8.1% of the population) report substantial difficulty in getting around and these same three respondents report that ASP has greatly improved their access to the community. It may be concluded from this that participation in ASP has had a positive impact on transportation satisfaction for those members with a specific need in that area and is not perceived as particularly helpful for those without difficulty.

Medical Care - It is quite apparent that respondents on the whole are aware of, and have access to, adequate medical care both on a regular and emergency basis. Respondents report that their level of satisfaction has not been effected by participation in ASP.

Independence

As perceived and reported by responding members of Group A, on the average they are experiencing an adequate level of independence. Based on 8 items, with a range of 24, measures of central tendency are fairly consistent and are all within the second quartile, below the 50th percentile. Thus, in terms of handling decision-making, dealing with conflict, and assertion, respondents feel they manage fairly well.

Table 22 - Independence - Measures of Central Tendency

R	=	24
X	=	16.351
Mdn	=	16.400
Mo	=	18.00

Sixteen point 2% of members report that ASP "greatly improved" their sense of independence. Forty point 5% report that the program "improved" their abilities to function independently. Thus, a positive impact is reported by 56.8% of the group. Forty point 5% report "no effect" in this area and one member reports a negative impact.

Summary - Personal Adjustment

On the whole, it would seem that participating members of Group A function fairly well in terms of Personal Adjustment. They generally feel adequately satisfied with their personal

lives in terms of residence, medical care, transportation, and feelings of independence. Nevertheless, respondents are feeling some degree of psychological distress, particularly in experiencing restlessness, anger, and preoccupation. And are further experiencing some difficulties in coping with this psychological distress.

Participation in the ASP is perceived as having varying degrees of impact on the quality of life in specific categories. The most prevalent positive impact is in the area of psychological distress, followed by coping skills and independence. Thus it seems consistent that ASP's most powerful impact in this category centers on positively effecting how members feel. The more physical, tangible aspects of quality of life (medical care, income, transportation, living conditions) seem not to be significantly effected by the program.

Negative impact is reported in three sub-categories of personal adjustment. Coping skills, and independence are reported as having become worse as a result of participation in the program by one member each (2.7%) and living conditions are reported to have diminished due to participation in ASP by two members (5.4%). Table 23 illustrates positive, negative, and neutral impact as perceived by population in each category.

Table 23 - Program Impact Response Frequencies - Personal Adjustment Category

Personal Adjustment Category	Positive Impact	Neutral Impact	Negative Impact
Psychological distress	83.8%	13.5%	2.7%
Coping Skills	75.7%	24.3%	0
Living conditions	35.1%	59.5%	5.4%
Income	32.4%	67.6%	0
Transportation	21.6%	78.4%	0
Medical care	8.1%	91.9%	0
Independence	56.8%	40.5%	2.7%

It can be concluded that, in general, participation in ASP is perceived as having had a positive impact or a neutral impact on participants. It has not for the most part had a negative or detrimental effect on members in the Personal Adjustment category.

2. Interpersonal Adjustment

Friend Role

Items in this category focus on how well and how often participants have interacted with others in their environments in the week prior to interview.

On the average, participating members score within the second quartile, well below the 50th percentile in this category of items. With a possible range of 18, the measures of central tendency are slightly skewed by a couple of high scores, but are relatively consistent.

Table 24 - Friend Role - Measures of Central Tendency

R	=	18
Mo	=	11.000
Mdn	=	12.000
X	=	12.486
S.D.	=	2.578

Based on these measures, it appears that participating members have some degree of interaction and appear adequately comfortable with the process. Specific types of interactions yield more specific information.

Considerably more interaction is reported to be experienced at school or work than in the participants' neighborhoods. Although 81.1% of participants report feeling comfortable around people, 24.3% report feeling that others are "not nice to them", and 18.9% feel that people tend to "avoid" them. Also, with 67.5% reporting little or no opportunity to meet new people, it would seem that the base of social contacts and comfort is limited.

Seventy point 3% of participating members report that the ASP had a positive impact on their ability to get along with other people. Of these, 21.6% report "great improvement". The remaining 29.7% report "no effect" and no negative impact responses exist.

Close Friend Role

Eighty-nine point 2% of participating members report having at least one close friend at the time of interview. With a range of 13, all measures of central tendency place within the 2nd quartile, well below the midpoint and are slightly positively skewed.

Table 25 - Close Friend Role - Measures of Central Tendency

R	=	13
Mo	=	8
Mdn	=	8.813
X	=	9.162
S.D.	=	2.410

It appears that more members share good news with friends than with family members and perceive friends as more supportive than family members in problematic situations. Furthermore 86.5% report support from other sources - agencies, associations, volunteers, etc. - to at least a minimum degree. In fact, 8.1% report more support from other sources than from family members. Therefore, by rank ordering, the percentage of social support perceived by members according to source of support we find friends ranks highest, others ranks second, and family members is last.

Sixty-four point 9% of respondents report that the ASP "increased" or "greatly increased" the help and support members feel they can count on from family, friends, and others. The remaining 35.1% report the program as having no effect on this aspect of life. No negative impact was reported.

Summary - Interpersonal Adjustment

Based on the data presented in the social aspects of quality of life, it would appear that Group A members do not experience, or do not perceive, social isolation. They report adequate interaction with friends and acquaintances, particularly in their daily school or work environments, and furthermore report feeling supported by their social peers. Most members also report having close friendships although maintaining these relationships, on average, is somewhat difficult. Also, it seems that the social base from which

On the average, it appears that members of Group A have what they perceive as adequate contact with close friends. Nevertheless, 85.7% of the respondents report from "a little" to " a great deal" of trouble in their close friendships, and 34.3% of respondents report minimal contacts with friends outside of ASP clients. Also, 42.9% report spending "very little" or "none" of their free time interacting with close friends. Thus is would appear that the average perception of Group A, regarding their role as a close friend, is somewhat misleading.

The ASP is reported to have had a positive impact on members' close friendships by 56.8% of the respondents. 42.9% report no effect and two members (5.4%) report a negative impact.

Social Support

The assumption that one depends upon family and friends for certain things and shares experiences with them on occasion is the basis of ascertaining the degree to which respondents perceive their social supports. On the average, members report "a lot" of support. With a slightly negatively skewed distribution, all measures of central tendency place within the second quartile.

Table 26 - Social Support - Measures of Central Tendency

R	=	15
X	=	10.973
Mdn	=	11.583
Mo	=	12.000
S.D.	=	2.967

Group A has the opportunity to develop friendships is somewhat restricted.

The ASP is reported as having had a positive impact on the majority of respondents in each of the categories, comprising interpersonal adjustment. The most prevalent positive impact is reported in the friendship role; getting along with people. Following is the affect on social sources of support, and lastly, impact on close friendships.

Negative impact was reported by 5.4% of the group (2 members) in the close friend role. No negative impact is reported in either of the other interpersonal adjustment categories.

Thus it would seem that ASP is more successful in impacting how members get along with others, and providing a peer group with which to socialize, as well as helping to develop a support network than it is in impacting on more intimate relationships.

3. Productivity

Job Performance

Eighteen responding members of Group A report some form of employment in the private sector at the time of interview. The 48.6% employment rate breaks down in the following manner:

full time employment	=	16.2%
part time employment	=	21.6%
irregular employment	=	10.8%

The data collected and analyzed for job performance is based on the 18 employed members' responses.

On the average, employed members of Group A report successful experiences in the work force. Seven point 7% report "little" or "no" difficulties doing their work and 94.4% report feeling "good" or "very good" about the quality of their work. Furthermore, 88.9% report "little" or "no" conflict with people while at work. These self-perceptions seem to be consistent with respondents' reports of complimentary statements made by others about their work.

Seventy-seven percent of respondents report finding their work interesting and 88.9% enjoy their jobs. This is also consistent with the finding that only 10.8% missed more than a day or two of scheduled work in the past month, while 50% report missing no time from work.

ASP impact on how "the job went last month" is reported as minimal. Only 27.8% (5 members) report a positive impact. The remaining 72.2% report "no effect".

In view of the finding that the vast majority of the employed respondents have been out of the program for several months, this is not a surprising impact. The ASP would have little direct influence on the job site of those not currently enrolled in the program.

School Performance

Fifty-one point 4% of Group A attended an educational program at the time of interview. Although this figure

corresponds with the 48.6% employed, these are not exclusive groups. Some responding members are included in both the employed and student roles, while others are absent from both. Full-time attendance in school accounts for 37.8% (14 members) of the student sub-group, whereas 5 members (13.5%) are half-time. No students attend school for less than half time. Ten of the 14 full-time students were in attendance at ASP at the time of interview. Therefore, the remaining 4, in addition to the 5 half-time students, attend other school programs. Two of these nine attend college, the remaining seven attend various high school programs within their community.

In addition to the 19 members involved in a formal educational program, 21.2% report participating in 1 to 20 hours of informal study.

The student members of Group A report relative success in school. Only one member reports missing more than one day of classes in the month prior to interview. Seventy-two point 2% report doing quite well in keeping up with the work and 94.4% report some degree of satisfaction with their performance. Eighty-three point 3% of the students report liking school, this percentage corresponds exactly with the absence of complaints from others.

Therefore, it seems appropriate to conclude that school is perceived as a positive experience by the students of Group A.

Eighty-five percent of the student members report that ASP has had a positive impact on their getting into, or back into, or staying in school. Furthermore, 85% report the program having improved or greatly improved the way school has gone. With 5% (one member) reporting no impact, two members report a negative impact on school performance.

Other Productive Activities

The manner in which respondents spend their free time, when not involved in work on the job, at home or in school, is reported in terms of numbers of hours per activity.

On the average, respondents spend less than seven hours weekly in each productive free-time activity.

Central tendency measures surpass the midpoint of the range, falling in the third quartile of the range. The mean, median and mode are consistent.

Table 27 - Other Productive Activities - Measures of Central Tendency

R	=	18
Mo	=	16.000
Mdn	=	18.292
X	=	18.405
S.D.	=	2.397

Table 28 illustrates the percentage of respondents who participated in specific activities during the week preceding the interview in each time category.

Table 28 - Activities Response Frequencies

ACTIVITY	≥ 20 hours	8-20 hours	1-7 hours	0 hours
Recreation/sports	5.4%	13.5%	59.5%	21.67%
Hobbies	16.2%	18.9%	40.5%	24.37%
T.V. (interesting)	10.8%	10.8%	43.2%	75.0%
Window shopping	0%	2.8%	22.2%	75.0%
Volunteer Work	0%	5.4%	16.2%	78.4%

Furthermore, when asked how much unstructured time passed which was boring or useless, 40.5% reported more than 7 hours in the week prior to the interview, with 18.9% reporting more than 20 hours in this category.

Thus, the data appears consistent. Members of Group A seem relatively less productive during free, unstructured time.

Fifty-four point 1% of responding members perceive involvement in ASP as having had a positive impact on their productive use of free time. Forty-three point 2% report no effect and 2.7% report a negative impact.

Summary - Productivity

Although it appears from the figures that all members of Group A are involved in some form of structured productivity, work or school, this is not, in fact, the case. Based on informally acquired information, to which this writer has access, there were, at the time of interview, 8 members of Group A who were not involved in any structured form of productivity. This equals 27% of the responding members of Group A. Therefore, it is evident that whereas some members of Group A are very productive, both working and attending

school, other members are non-productive in the traditional sense.

The ASP's reported impact on productivity is greatest in the area of education followed by free-time productivity and finally on-the-job productivity.

It is important to note that participation in the ASP vocational training business, Kids Kafe, is not considered employment in the context of this study. This is a program component which trains and reimburses participants, but is required of Group A members as part of their treatment program. As such, it was excluded from job productivity. It was an error in design not to address this aspect of productivity and its affects directly and in conjunction with private-sector employment.

4. Civic Adjustment

Legal

Members were asked a set of questions about personal contact with police, courts, probation, etc. in the month preceding the interview. Responses were based on contacts only. Circumstances were not addressed.

Thirty-seven point 8% of the respondents (14 members) report some form of contact with a legal agency or representative within the defined time frame. Categories are not mutually exclusive.

Table 29 illustrates, in descending order of frequency, the specific type of legal contacts with which members of Group A report contact.

Table 29 - Legal Adjustment - Response Frequencies

Related Contact	% of Respondents Having Contact
Violence related	35.7%
Theft related	28.6%
Alcohol related	21.4%
Traffic related	21.4%
Civil action related	14.3%
Drug related	7.1%

Of those members who report contact with legal agencies, 64.3% perceive that involvement in the ASP had no impact on their legal difficulties, 35.7% report a positive impact. No negative impact is reported.

Alcohol

Fifteen members (40.5%) report having had an alcoholic beverage in the month preceding the interview. (Twelve of the responding members of Group A are an appropriate age to consume alcoholic beverages in the State of Massachusetts.)

In order to ascertain if alcoholic consumption is a problem to those who report engaging in this activity, a series of questions were administered. The results indicate that 36.7% of this sub-group have some degree of difficulty controlling their consumption. Forty-six point 7% report difficulties ranging from a few to a lot in controlling their behavior because of alcohol consumption. Additionally, 53.3% experience the same degree of difficulty with their own feelings due to consumption. Three members (20%) report

minor health related problems. Minor problems are also reported with significant others; 26.6% report problems with parents, and 33.3% with friends. Alcohol is reported to be responsible for a few problems in daily functioning by two members. Thus although 15 members report consumption, the data indicates only minor problems related to alcohol consumption with the exception of two members who report more severe difficulties.

Of the reported alcohol consumers, 86.7% report that involvement in ASP had no impact on any problems related to alcohol.

Drugs

Twenty-four (64.9%) of the respondents report having used some form of drug in the month prior to being interviewed. This includes medications of any kind, prescription, over-the-counter and street drugs.

Of these members, 28% report some degree of difficulty controlling usage. One member reports very severe problems in this regard. Controlling behavior and health problems due to drug use are reported to be problematic by 24% (6 members) of the sub-group. No severe problems are reported in this regard. Thirty-two percent report difficulties with their feelings relevant to drug use, again one member claiming very severe problems. One member reports very severe problems with parents, friends, and daily activities because of drug usage. Very minimal problems are reported by an additional two members in these areas.

Thus is appears that the majority of drug usage is not problematic to respondents, in general, although one member does report very severe problems in this regard.

Regarding program impact on problems associated with drug usage, 77.8% report none. Negative impact is reported by one member (3.7%) and positive impact is reported by 18.5% of those who engage.

Summary - Civic Adjustment

Of the three components used to assess civic adjustment, drug usage is the most prevalent. As many members of Group A take prescription drugs and over-the-counter medications were also included, this high frequency is not indicative of drug misuse or abuse. With the exception of one member, minimal problems are perceived by respondents.

Alcohol consumption is reported by less than half of the population and 32.43% of these members are of legal drinking age. Again, relatively few problems related to alcohol are reported by members with the exception of two respondents.

Legal contacts have been experienced least by Group A members in comparison with the other categories. However, the most prevalent contacts are related to serious circumstances; violence and theft.

Therefore, it would seem that although specific members report severe problems in one or another area of civic adjustment, in general, this does not seem to be indicative of the group, on average.

As the majority of respondents do not perceive their usage of alcohol or drugs as problematic, they also do not perceive the ASP as having had any impact on these issues.

Program Impact

For each of the previous categories of quality of life, the members' perceptions of the Adolescent Support Program's impact has been discussed. In this section that information is summarized.

On the average, responding members report that ASP has had a positive impact. With all measures of central tendency placing in the 2nd quartile, the general picture is that ASP has "improved" the overall quality of life of Group A members.

Table 30 - Program Impact - Measures of Central Tendency

R	=	25
Mo	=	31.000
Mdn	=	31.667
X	=	32.378
S.D.	=	5.570

Table 31 illustrates the percentage of respondents in each category as they perceive the impact of the ASP. As indicated, no respondents report that ASP made any aspect of quality of life (as measured here) "much worse". In seven of the 17 categories (41.8%), respondents report a negative impact of "worse", but none of these exceed 10% of respondents. Thus, based on this data, it would seem that, as perceived by members of Group A, involvement in ASP generally has not been detrimental to members. This is an important finding as it points in the general direction that the day

treatment program under investigation is a viable alternative to hospitalization for this population.

Table 31 - Program Impact - Response Frequencies

	Very Helpful	Helpful	No Effect	Worse	Much Worse
distress	24.3	59.5	13.5	2.7	0
coping	27.0	48.6	24.3	0	0
sat. res.	8.1	27.0	59.5	5.4	0
income	8.1	24.3	67.6	0	0
transportation	8.1	13.5	78.4	0	0
medical care	2.7	5.4	91.9	0	0
independence	16.2	40.5	40.5	2.7	0
friendship	21.6	48.6	29.7	0	0
close friend	14.3	37.1	42.9	5.7	0
social supports	16.2	48.6	35.1	0	0
work	5.6	22.2	72.2	0	0
school attendance	85.0	15.0	0	0	0
school quality	35.0	50.0	5.0	10.0	0
activities	10.8	43.2	43.2	2.7	0
legal	7.1	28.6	64.3	0	0
alcohol	6.7	6.7	86.7	0	0
drug	11.1	7.4	77.8	3.7	0

The specific aspects of quality of life that are perceived by Group A members as having been improved by program intervention is of interest as an indicator of how ASP is considered helpful.

Overwhelmingly agreed upon by respondents is the impact of ASP on their education. Eighty-five percent of members report that ASP enabled them to return to or remain in school as well as improving their educational experience. Education is the area which seems most positively impacted, as perceived by members of Group A. As education is one of the primary aspects of adolescence and one of the ASP's stated goals for clients, this is a considerably important finding.

The second area which is reported to be most positively impacted by ASP involvement is psychological distress. Eighty-three point 8% of members report that ASP has improved the way they feel. Considering the population under study, decreasing the level of distress is a very important aspect of the quality of their lives.

The third most frequently reported category of improvement due to ASP involvement is coping skills. Seventy-five point 6% of the respondents report that ASP has greatly improved, or improved their management of unpleasant feelings. This is a very significant finding. Generally, the clinical goals for psychotic and borderline psychotic individuals is to learn to manage and cope with life stresses and to decrease suffering (Mayer, 1985; Hartmann, Glasser, Greenblatt, Solomon, & Levinson, 1968). Thus is would appear that ASP is at least considered to be reaching that goal by the vast majority of its client members.

Peer relationships, friendship, is a dominant focus of adolescence. With 70.2% of respondents reporting this category to have been improved by ASP involvement, a major aspect of the quality of life seems to have been impacted.

The next category most prevalently reported to have been positively impacted upon is social supports. Sixty-four point 8% of Group A members report that the supports they feel they can depend upon in their community were increased by participation in the ASP. This is another important finding as it is the responsibility of community-based programs to do

just that. One of the underlying principles of deinstitutionalization is that by enhancing the community supports, hospitalizations are diminished.

Following social supports is independence, productivity during non-structured activities (use of free time), and close friendships. More than 50% of responding members report improvement in these categories.

The categories which do not seem to be positively impacted upon by ASP involvement, by a majority of group members seem to be of two types. Responding members on the whole do not report very much improvement in the civic adjustment categories, legal, alcohol, and drug involvement. Respondents also do not report much need for help in these areas. Based on this writer's extensive experience with the program and Group A members, this perception is accurate. Adolescents with drug, alcohol and legal difficulties generally are not members of the target population for the ASP. These types of behavioral manifestations are more frequently and successfully serviced by other community or state agencies. Therefore, there is less need for attention to these categories of quality of life, in general.

The second set of categories to which few respondents report improvement due to program intervention are concerned with satisfaction with basic needs: residence, income, transportation, and medical care. As with civic adjustment, respondents do not report a need in these areas, nor do they report positive impact by the program, on the whole. In

general, Group A members report adequate satisfaction regarding their basic needs.

The item regarding program impact on work productivity does not seem appropriate to this study as discussed earlier. Nevertheless, it would appear that the question of program impact on employment productivity needs to be investigated further in order to ascertain ASP's effectiveness in this area.

In addition to exploring the impact of the ASP on members of Group A regarding specific aspects of the quality of their lives, the Oregon Quality of Life Questionnaire seeks to determine which aspects of the program were helpful to the Group, on average. The following dimensions of the program are thereby explored:

1) the helpfulness of caseworkers interventions or activities;

2) the helpfulness of specific program aspects;

3) general satisfaction with the program.

Also, the helpfulness of others, outside of the ASP, is explored.

Analysis of the data in the above-mentioned categories goes beyond the exploration of whether the ASP is perceived as helpful, to ascertain what about the program was helpful to members of Group A, on the average. Data is presented by category, followed by individual items.

1. Helpfulness of Caseworker Interventions

On the average, responding members report the interventions of caseworkers to have been very helpful. In this category of questionnaire items, all measures of central tendency place in the first quartile of the possible range as depicted in Table 32.

TABLE 32 - Helpfulness of Caseworker Interventions - Measures of Central Tendency

R	=	12
Mo	=	8
Mdn	=	10
X	=	11
S.D.	=	3.153

The frequency distribution for this data is positively skewed by a few high scores.

Intervention #1 - Listening

Forty-five point 9% of respondents report that it was "very helpful" to be listened to by a caseworker. An additional 37.8% report this intervention was "helpful". Thus, a total of 83.8% of Group A found this intervention to have been positive. Zero respondents report a negative effect and 16.2% report "no effect".

Intervention #2 - Caring

Forty-eight point 6% of respondents report that it was "very helpful" to them to be cared about by a caseworker. An additional 32.4% report it to have been "helpful". This yields a combined percentage of 81.0%. The remaining 19% of the group report "no effect".

Intervention #3 - Encouraging

Forty-four point 4% of the Group report being encouraged by a caseworker to have been "very helpful" in dealing with problems. Another 38.9% report this intervention to have been "helpful". An additional 13.9% report "no effect", and 2.8% (one member) found this intervention to have been "harmful".

Intervention #4 - Informing, Confronting

Sixteen point 2% of the Group report that being given information relevant to their problems and/or available services was "very helpful". An additional 66.7% found this intervention to be "helpful" in dealing with problems. Sixteen point 2% found intervention #4 to be of no effect and 2.7% (one member) report a "harmful" effect.

Intervention #5 - Calming

One-third of respondents report the attempts to "calm them down" were "very helpful". An additional 36.1% report this intervention to have been helpful, thereby equally a 69.4% total positive effect. An additional 25.0% found this intervention to be of "no effect" and one member reports it to have had a "harmful" effect.

Rank ordering these interventions in descending order according to the "very helpful" response is illustrated in Table 33.

Table 33 - Helpfulness of Caseworker Interventions - Response Frequencies

	Very Helpful	Helpful	Total
Caring	48.6%	32.4%	81.0%
Listening	45.9%	37.8%	83.8%
Encouraging	44.4%	38.9%	83.8%
Calming	33.3%	36.1%	69.4%
Informing, Confronting	16.7%	66.7%	83.3%

2. Helpfulness of Specific Aspects of the Program

The responding members of Group A report that the services provided by ASP were "very helpful", on the average.

Table 34 - Helpfulness of Specific Program Aspects - Measures of Central Tendency

R	=	16
Mo	=	14.000
Mdn	=	14.583
X	=	14.973
S.D.	=	1.787

As demonstrated above, the measures of central tendency are consistent and place within the first quartile of the possible range.

Respondents were asked to assess the following aspects of the ASP in terms of how helpful each one was in dealing with the problems which brought them to ASP.

Aspect #1 - Limit Setting

A total of 78.4% of the respondents report that setting limits and helping them maintain them was helpful. Of these positive responses, 24.3% reported a "very helpful" response. The remaining 21.6% report that setting limits had "no effect".

Aspect #2 - Caseworker

Twenty-nine point 7% of Group A members report that their caseworker was "very helpful". An additional 54.1% gave a "helpful" response. Sixteen point 2% report "no effect".

Aspect #3 - Friends

Fourteen point 3% report their friends to be very helpful. Forty-five point 7% report friends were "helpful"; 31.4% found friends had "no effect"; 2.7% report friends to have been "harmful" and 5.4% report "very harmful".

Aspect #4 - Medications

Twelve point 5% of those respondents who had taken medication found it "very helpful" whereas 50% report medication to be "helpful". An additional 18.8% report "no effect" and 12.5% found them "harmful". The final 6.3% (one member) reports a "very harmful" effect from medication. These responses are based on the 16 members of Group A who, in their tenure at ASP, took psychotropic medications.

Aspect #5 - Religious Associations

The majority of respondents found religious association to have "no effect" (37.8%) or to "not apply" (31.8%). Of the remaining 24.4%, 18.9% report religious associations as "helpful", 2.7% as "very helpful". A final 2.7% report this aspect to be "harmful".

Aspect #6 - Other Caseworkers, Therapists

Fifteen point 6% of the respondents who had additional therapeutic contacts report these to have been "very helpful". Fifty percent more perceive this aspect as

"helpful". Twenty-one point 9% say there was "no effect" while 9.4% found a "harmful" effect. The remaining one respondent reports the outside therapy to have been "very harmful". This data is based on the responses of 24 members of Group A.

Aspect #7 - Time Passing

Natural maturation and the passage of time was reported as "very helpful" to 25.7% of the respondents. An additional 31.4% found this to be "helpful". Twenty-eight point 6% report "no effect", while five members (13.5%) report a "harmful" effect of aging.

Aspect #8 - Crisis Intervention

Crisis intervention services are reported to have been "very helpful" to 41.7% of respondents. An additional 37.5% report a "helpful" effect. "No effect" was reported by the remaining 20.8%.

Aspect #9 - Keeping Busy

Keeping busy is reported to have been positively effective by all but two responding members. Forty-three point 2% report that this aspect was "very helpful" and an additional 51.4% found it to be "helpful", the remaining 5.4% report "no effect".

Aspect #10 - Being With People

Being with people is reported to have been positively effective by all but four members of Group A. With 35.1% reporting a "very helpful" effect and 54.1% reporting a

"helpful" effect, a total of 89.2% is reached. The remaining members, (10.8%) report "no effect".

Aspect #11 - Physical Activities

Thirty-one point 4% of responding members found physical activities to be "very helpful". An additional 45.7% report a "helpful" result. Seventeen point 1% found "no effect" and 5.7% report physical activity to be "harmful".

Aspect #12 - Family

Nineteen point 4% of respondents report their families to have been "very helpful". An additional 50% found families "helpful". "No effect" was perceived by 13.9% and "harmful" and "very harmful" effects are reported by 8.3% (three members) for each response.

Aspect #13 - Group Therapy Meetings

Group therapy meetings within ASP are reported to have been "very helpful" to 11.4% of the respondents with an additional 48.6% reporting this aspect as "helpful". Thirty-seven point 1% report "no effect" and a "harmful" effect is reported by one member of Group A.

Aspect #14 - Family Doctor

Sixteen point 2% of the group reported this aspect as not applicable. One member reported "very harmful" and "harmful" effects respectively. Forty-five point 9% found "no effect" while 27.0% report their physician as "helpful". The remaining two members report a "very helpful" effect.

Aspect #15 - Other

Responding members were given the opportunity to name anything else that was of particular help in dealing with the problems which brought them into ASP which were not included.

The following responses were noted as having been helpful and have been categorized:

1. school, academics, teacher;
2. Kids Kafe, work;
3. therapy, point sheets (behavioral tracking system);
4. structured recreational activities, trips, evening recs;
5. being cared about, the people, staff.

Rank order of the 14 specific items is presented in decelerating order in Table 35. * Indicates those items directly pertaining to ASP services.

Table 35 - Helpfulness of Specific Program Aspects - Response Frequencies

Aspect	% Very Helpful Responses	% Helpful Responses	Total
* keeping busy	43.2	51.4	94.6
* crisis intervention	41.7	37.5	79.2
* being with people	35.1	54.1	89.2
* physical activities	31.4	45.7	77.1
* caseworker	29.7	54.1	83.8
time passing	25.7	31.4	57.1
* limit setting	24.3	54.1	78.4
family	19.4	50.0	69.4
other therapists	15.6	50.0	65.6
friends	14.3	45.7	60.0
medication	12.5	50.0	62.5
* group therapy	11.4	48.6	60.0
family doctor	6.5	32.3	38.7
religious association	4.3	30.4	34.7

Of particular interest to the writer is the consistency with which aspects related to milieu therapy are reported as "helpful". These include: keeping busy, being with people,

physical activities, caseworker, and limit setting. In the broader sense, time passing, friends, and group therapy could be considered pertinent aspects of the concept of the milieu. Furthermore, 6 of the 7 highest ranking aspects are directly related to the ASP.

It would appear, therefore, that members of Group A perceive the ASP as having improved their quality of life. The program pieces most recognized as helpful in effecting this improvement appear related to the concept of the milieu.

3. General Satisfaction With the Program

Responses to this set of items consisted of yes and no answers. Items which were not applicable, served as a zero response and statistics were adjusted accordingly.

With a range of 16, all measures of central tendency place within the 1st quartile as indicated in Table 36 and are consistent:

Table 36 - General Satisfaction With Program Measures of Central Tendency

R	=	16
Mo	=	14.000
Mdn	=	14.883
X	=	14.973

Because only two responses are possible, data is presented in rank order according to most prevalent satisfaction with the service in Table 37.

Table 37 - General Satisfaction with Program - Response Frequencies

Program Service	% Satisfied
Caseworker accessibility	97.3%
Informed about program	94.6%
Decision to terminate	92.6%

Table 37 (continued)

Staff attitude	91.7%
Acceptance into program	86.5%
Individual therapy sessions	85.7%
What you wanted	83.8%
Initial contacts with caseworker	81.1%
Initial comfort in program	81.1%
Caseworker attitude towards you	80.6%
Convenience of program	80.6%
Medications received	78.6%

From the above data it is clear that more than three-quarters of the members of Group A report "satisfaction" with every item presented.

In addition to the three categories presented to ascertain client perceptions of the impact of, effectiveness of, and satisfaction with the ASP, responding members were given an opportunity to make comments, criticisms or suggestions about ASP. The responses are included verbatim below:

Response #1: "I learned something, I guess. If I hadn't gone to ASP, I'd have been out of school."

Response #2: It (ASP) was to get us out of the Pittsfield school system, which we couldn't handle. I did more work because it was more structured. That was good, but you can't have too much structure, because it's for people who can't handle that."

Response #3: "I think I learned that therapy is important to have in your life on an ongoing basis."

Response #4: "They're the only people I know."

Response #5: "It was a nice school."

Response #6: "If someone is at the point of going off, they should be kicked out until they can handle themselves here better."

Response #7: "Thanks for being there for me, and caring about me and my feelings."

Response #8: "Clients should go to group therapy of their own free will. ASP was very positive towards my personal interests, hobbies, and goals. Thank you."

Response #9: "I liked it here and it has really helped me learn how to cope with life in general."

Response #10: "The program helps me with my problems."

Response #11: "I do good here. Ethel (caseworker) hasn't seen me in the past two weeks."

Response #12: "The structure of the class helped my mind to stay on focus."

Response #13: "I feel that ASP is a good program for myself. I feel ASP has helped me to grow, live, and to become more mature with myself. I would never think twice about getting help from ASP because of all the people who cared for me and helped me become a better person in school and in my life."

Response #14: "You should get kids to help other kids rather than keep them out of each other's business, like peer counseling and support."

Response #15: "It was a very nice school, a nice program - you would never want to leave there."

Response #16: "Close it down."

Summary - Quality of Life

The mean score for the quality of life of responding members of Group A is in the 1st quartile of the possible range. This would indicate that, on the average, members of Group A are satisfied with the quality of their lives as measured by this questionnaire.

As discussed in Section II of this chapter, the frequency and duration of psychiatric hospitalization, on the average,

diminished for Group A members. Thus there is a decrease in negative aspects of quality of life. The combination of these two indicators, self-satisfaction and reduced institutionalization, support the finding that members of Group A have a generally positive quality of life. Furthermore, it would seem that participation in the Adolescent Support Program is at least partially related to this finding.

Section Four - Profile of the Model Member of the Adolescent Support Program

Research Question #4: What is the model profile of students attending the Adolescent Support Program?

Introduction

It is the intent of Section Four to present the profile of the model member of Group A. The procedure involved the establishment of an "in-house-jury" to respond to the appropriateness of the choice of independent variables. Five multi-disciplinary professionals in the field of education and psychology responded to an initial list of characteristics. A final selection of 10 independent variables was made.

Group A is comprised of 43 members.

Independent Variable Findings

Entry Age

The range of entry ages is 13 to 20. The measures of central tendency are consistent:

mode	=	15 years old
median	=	15.25 years old
mean	=	15.72 years old
standard deviation	=	1.8617

Thus, the "model student" enters the Adolescent Support Program in the fifteenth year of life (See Graph 4-1).

Entry Grade

The range of entry grades is 6th through 12th grade. Those members of Group A who entered the ASP with an "ungraded" status were assigned an entry grade on the basis of either (1) graduation or (2) grade at which next educational program began. Decelerating grades were then calculated back to entry at a rate of one grade per year. The measures of central tendency for entry grade are also consistent:

mode	=	ninth grade
median	=	ninth grade
mean	=	9.48 grade
standard deviation	=	1.66

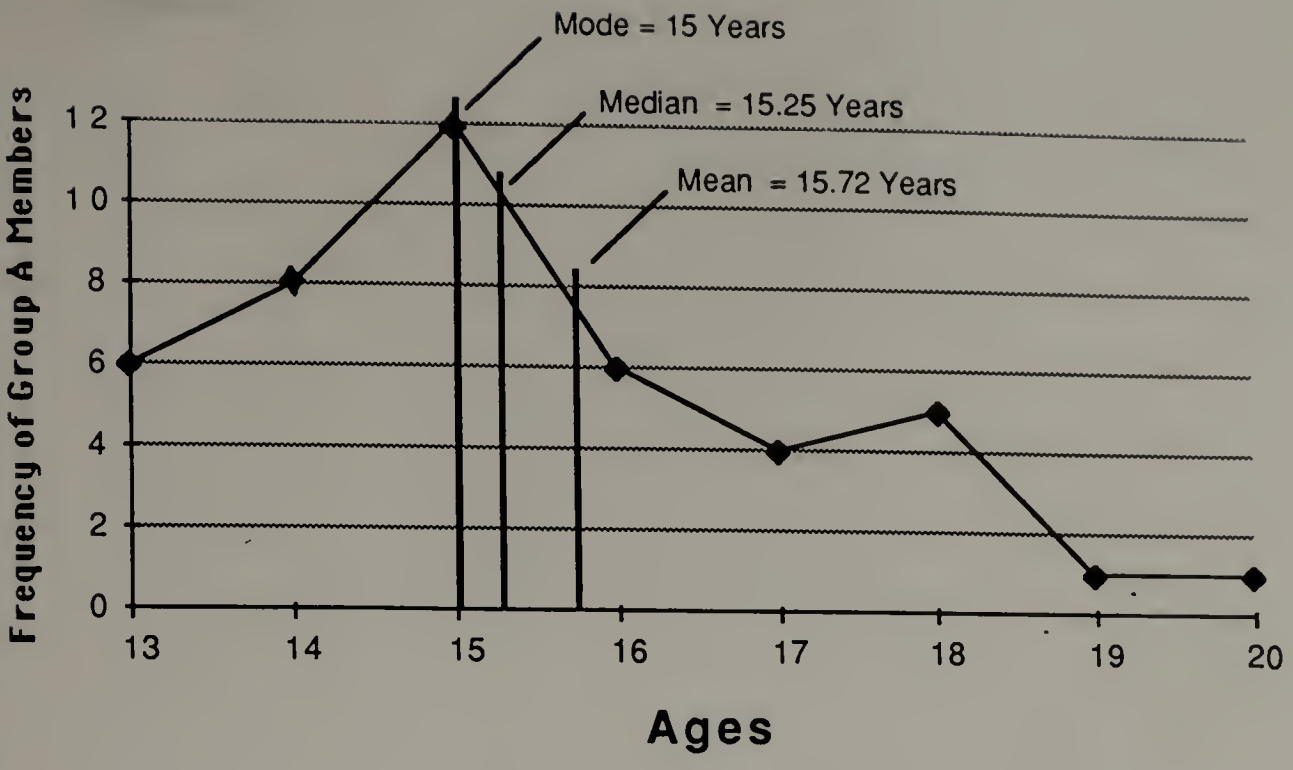
The "model student" enters the ASP as a ninth grader (See Graph 4-2).

Length of Stay

The range of total number of months enrolled in the ASP is 3 to 44 months. Those members with a length of stay of less than nine months are currently enrolled in the program as others with a longer length of stay may be, but not necessarily.

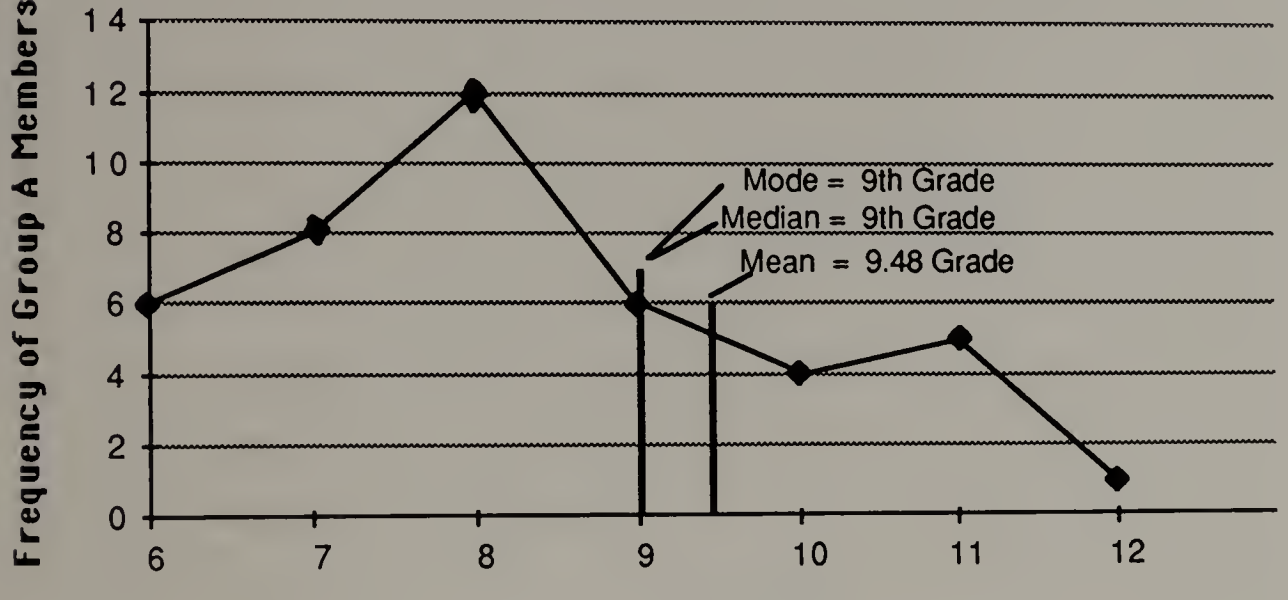
The measures of central tendency are:

mode	=	25 months
median	=	18 months
mean	=	18.27 months
standard deviation	=	9.9181



Graph 4-1

Frequency Distribution **Entry Age**



Graph 4-2

Frequency Distribution **Entry Grade**

Thus the "model student" remains enrolled in the ASP for approximately 18 months, with an expected range of 8 to 28 months (See Graph 4-3).

Gender

Of the 43 members of Group A, 23 are males (53.48%) and 20 females (46.51%). Thus, it is slightly more likely that the "model student" of ASP will be male.

Socio-Economic Level

Members of Group A were assigned a code number to compute socio-economic level on the basis of eligibility for the Pittsfield Public School free lunch program. The code consisted of:

1 = eligible for free lunch

2 = eligible for reduced lunch rate

3 = not eligible for free or reduced lunch

Thus, Code #1 represents the lowest socio-economic level, code #3 represents the highest socio-economic level for this variable.

Twenty-six members (60.47%) were assigned a Code #1, one member (2.32%) was assigned a Code #2, and 16 members (37.21%) were assigned Code #3.

mode	=	Code #1
median	=	Code #1
mean	=	1.767
standard deviation	=	.9388

Thus the "model student" of ASP is most likely to be eligible for the Pittsfield Public School free lunch program and is therefore assumed to be in a lower socio-economic group of society.

Intelligence Quotient (I.Q.)

Full scale scores from the most recently administered WISC-R or WAIS range from 58 to 128.

mode	=	87, 89, 90, 105
median	=	87
mean	=	88.4595
standard deviation	=	15.0436

For the purposes of demonstration, I.Q. scores have been grouped by intervals of 10 (See Graph 4-4).

The ASP "model student" has an I.Q. of 88.46 and is expected to score within the range of 73 and 103 on the appropriate intelligence test.

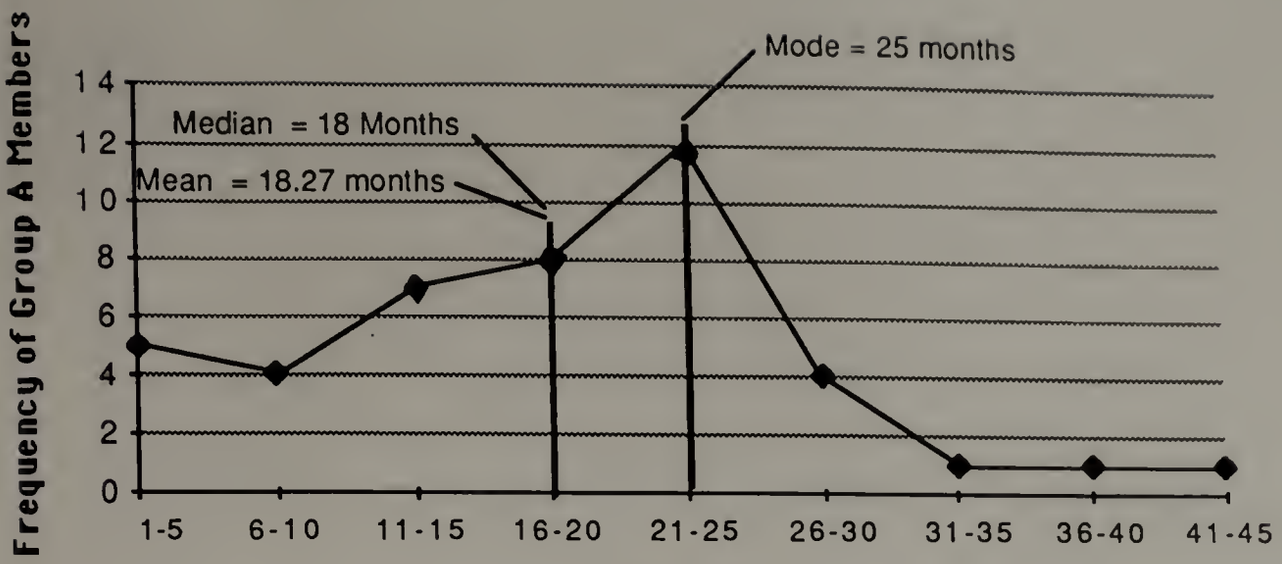
Hospital Days

Hospital days are divided into the sub-categories, Before and After Entry.

Before Entry Hospital Days

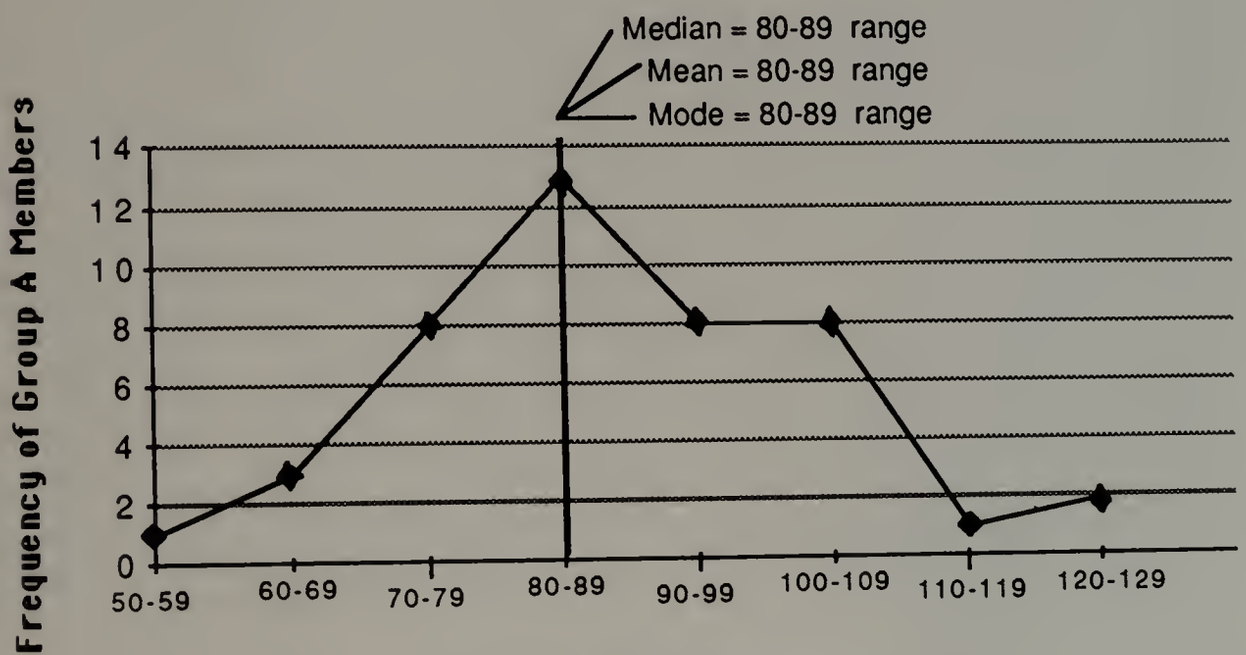
With a range of 0-903 days spent in an in-patient psychiatric hospital, the measures of central tendency are:

mode	=	0 days (44.19% of members)
median	=	17 days
mean	=	106.4418 days
adjusted mean	=	184.8261 days
standard deviation	=	204.6773



Graph 4-3

Frequency Distribution — Length of Stay



Graph 4-4

Frequency Distribution — Intelligence Quotients

After Entry Hospital Days

The range of data in this sub-category is from 0 days to 217 days.

mode	=	0 days (74.42% of members)
median	=	0 days
mean	=	20.7906
adjusted mean	=	7.7778
standard deviation	=	7.4796

It is projected from this data that the entering "model student" of ASP will have been hospitalized, but for an unpredictable amount of time. It is also projected from the data that the "model student" will not be admitted to a psychiatric hospital after discharge.

Additional Agency Involvement

Members of Group A were assigned a numeral to represent the total number of adolescent/youth services received while enrolled in the ASP. Additional agency involvement range from 0-4.

mode	=	3
median	=	2
mean	=	2.3929
standard deviation	=	.8751

The ASP "model student" is concurrently involved with two additional agencies and can be expected to be involved with

one and one-half to three separate youth/adolescent agencies during ASP tenure.

Degree of Pathology

As defined in Chapter 3, members of Group A were grouped by this writer into four categories based on histories, agency involvements, behavioral characteristics, and scholastic functioning. Each group was assigned a number code:

Code #1 = severely and chronically emotionally disturbed members

Code #2 = short term emotional illness

Code #3 = recurring psychiatric and violent episodes

Code #4 = acute emotional crises

	Group 1	Group 2	Group 3	Group 4
# of members	7	9	24	3
% of population	16.28%	20.93%	55.81%	6.98%

It is likely that the "model ASP student" has recurring psychiatric and violent episodes. Behaviors such as substance abuse, assaultiveness and destructiveness are manifested. Little or no impulse control is demonstrated and the "model student" is likely to be dangerous to self and others. Additionally, scholastic performance is substantially below grade level expectations with school performance hindered by acting-out behaviors. Due to the

limited ability to function independently, management services are provided by agencies (See Graph 4-6).

Time Out of Program

Ten of the 43 members of Group A are currently enrolled in the program and therefore have zero time out of the program. The remaining 33 members range in time since discharge from 2 months to 60 months. The adjusted measures of central tendency are:

adjusted mode = 36 months

adjusted median = 36 months

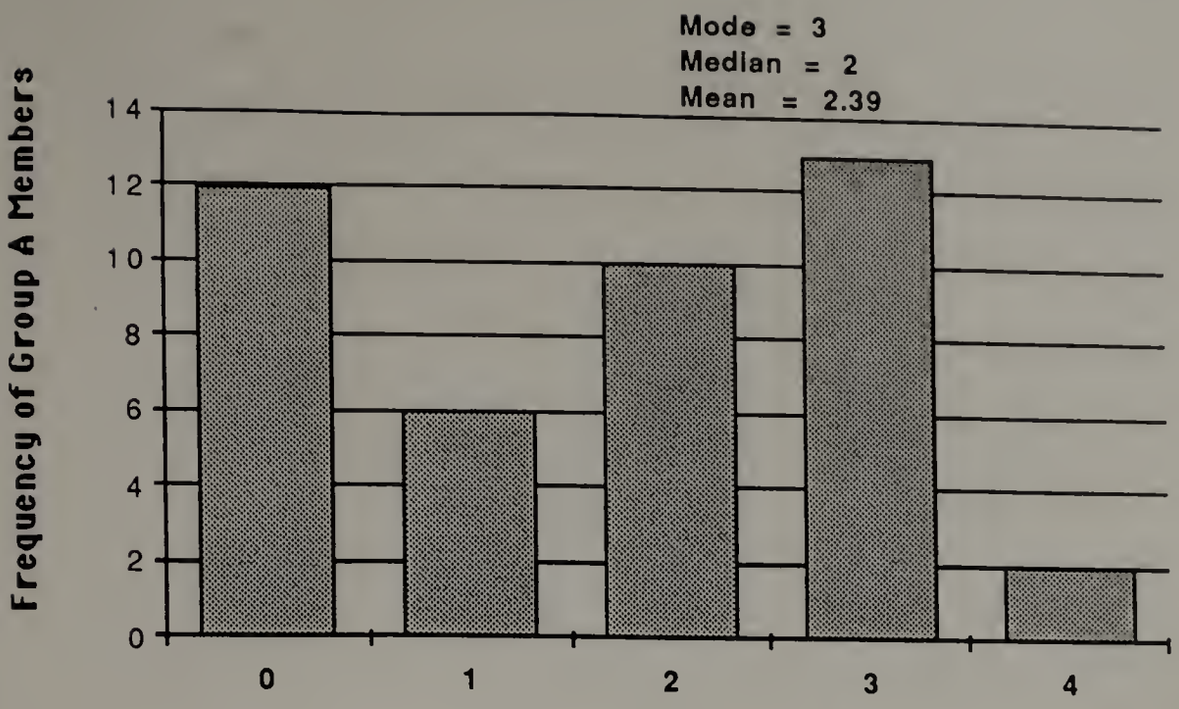
adjusted mean = 27.93 months

This information is not relevant for future use, nevertheless, the model ASP student has been out of the program for three years (See Graph 4-7).

Summary - Section Four

Combining the findings of the ten independent variables described above creates a picture profile of the "model student" of the Adolescent Support Program or the typical member of Group A.

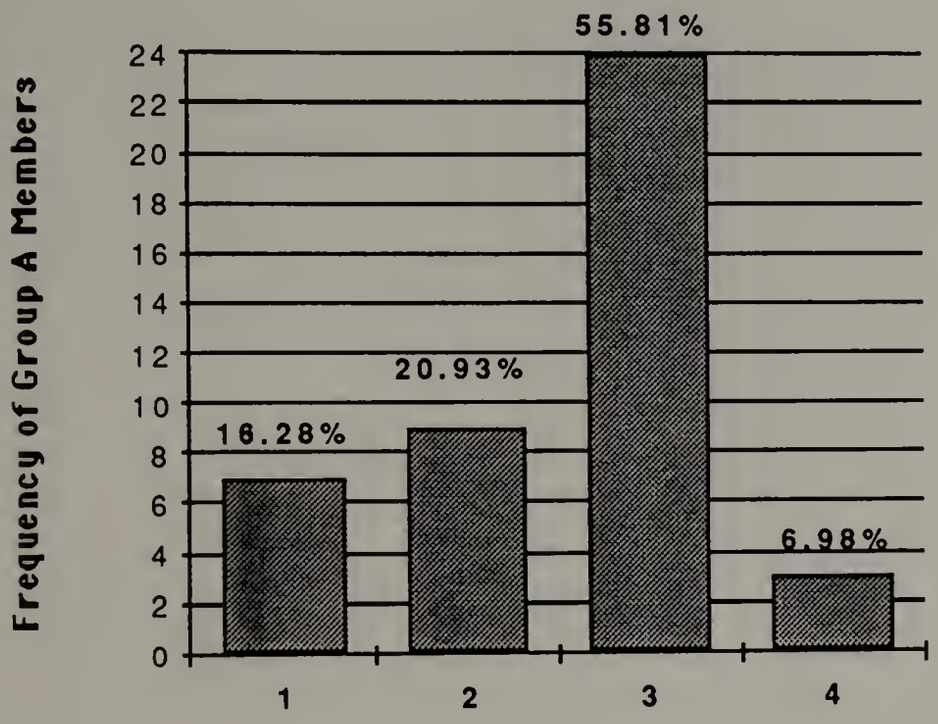
This "model student" enters the Adolescent Support Program as a fifteen-year old ninth grader. This is an appropriate age-grade match indicating that the "model student" has neither accelerated nor repeated grade placement in school to that point. The projected model student is more likely to be male and is eligible for the free lunch program as defined by the Pittsfield Public School



Graph 4-5

Frequency Distribution

Additional Agency Involvement

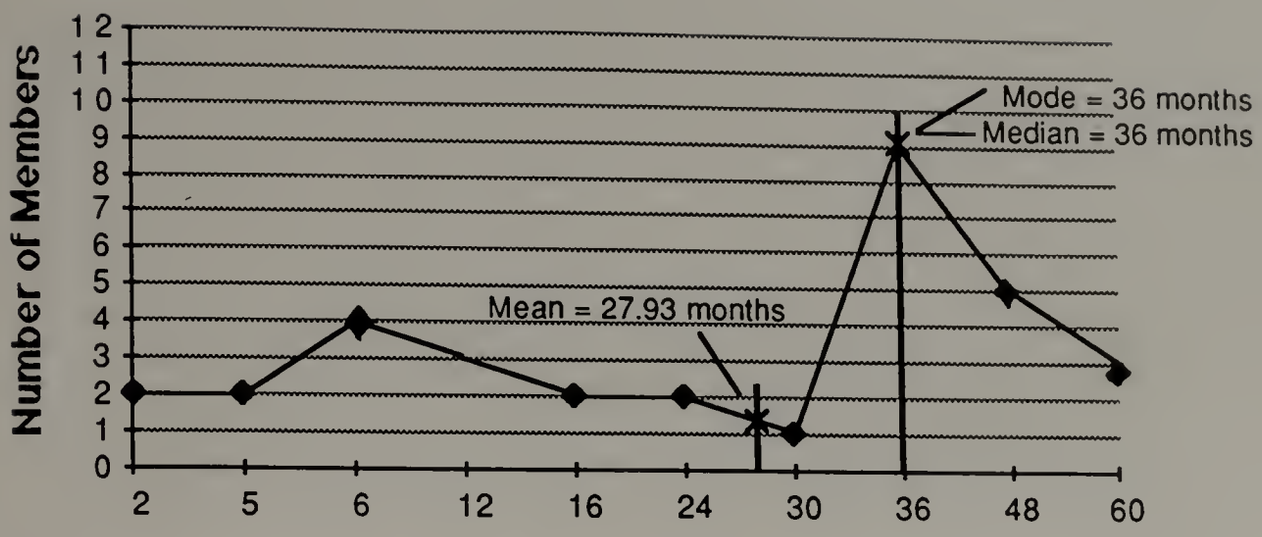


Pathology Groups

Graph 4-6

Frequency Distribution

Degree of Pathology



Graph 4-7

Frequency Distribution

Time Out of Program

System, thus being in a lower socio-economic grouping in that society.

The fifteen-year old entering male student is likely to remain in the Adolescent Support Program for 18 months. He will have spent some unpredictable number of days in a psychiatric hospital setting prior to entering the program.

The "model student" has a measured full scale intelligence quotient which falls just within one standard deviation from the mean or what is generally accepted as borderline-normal intelligence. Thus he is in the dull-normal category of intellectual potential.

There are probably two additional service-providing agencies working with the "model student" concurrent to his participation in the ASP. This is commensurate with the projection that he is a chronically emotionally disturbed youngster exhibiting behaviors and a history which would fall within the realm of borderline psychotic conditions.

Finally, the "model student" has been discharged and has been out of the program for three years. In that time, he probably has not been re-admitted to a psychiatric hospital setting.

Section Five - Relationships Between Variables of Client Members and Their Quality of Life

Research Question #5: Which student background characteristics predict outcome?

Introduction

It is the intent of Section Five to relate the independent variables to outcomes in order to ascertain which background characteristics are associated with outcomes, if any, and which can therefore be used as predictors of outcome.

The Independent Variables are:

1. entry age
2. entry grade
3. length of stay
4. gender
5. socio-economic level
6. intelligence quotient
7. hospital days before entry
8. additional agency involvement
9. pathology group
10. time out of program

Each independent variable was defined and discussed in Section Four.

The dependent variable is the measured quality of life as determined by the Oregon Quality of Life Questionnaire (Section Three). In addition to the total quality of life

score, the following sub-categories are extracted as outcome variables:

1. psychological distress
2. tolerance of distress (coping skills)
3. basic needs satisfaction
4. independence
5. friendship
6. close friendship
7. social supports
8. job productivity
9. educational productivity
10. productive activities
11. legal contacts
12. alcohol usage
13. drug usage
14. ASP impact
15. hospital days (after entry)

Each of the dependent or outcome variables was discussed in Section Three. Using the statistical procedure of Pearson r, the degree to which each of the independent variables is associated with each dependent variable is ascertained. From the correlation coefficients, the coefficient of determination is calculated for each pair of variables for which a significant level of association has

been found. Significance is defined at the .05 level for this work.

In decelerating order, the significantly related correlations are presented in Table 39. The interpretation of the correlation coefficient is based on J.P. Guilford's suggestion for values of r (Sprinthall, 1987). These are presented below in Table 38:

Table 38 - Correlation Coefficient Interpretations

r value	Interpretation
less than .20	slight; almost negligible relationship
.20 - .40	low correlation, definite but small relationship
.40 - .70	moderate correlation; substantial relationship
.70 - .90	high correlation; marked relationship
.90 - 1.00	very high correlation; very dependable relationship

Findings

As indicated in Table 39, one correlation is of "high correlation" status. Six pairs are moderately related while the remaining thirteen have a small relationship. None of the variables have a very dependable relationship and 90% of the variable pairs show no relationship.

Table 39 - Correlations - Dependent and Independent Variables

Independent Variable	Dependent Variable	r	Interpretation	r 2	+/-
intelligence quotient	# hospital days (after)	.7849	high correlation	61.61%	+
socio-economic level	# hospital days (after)	.6629	moderate correlation	43.94%	+
degree of pathology	psychological distress	.4581	moderate correlation	20.99%	+
intelligence quotient	close friends	.4190	moderate correlation	17.56%	-
gender	ASP impact	.4115	moderate correlation	16.93%	+
socio-economic level	job performance	.4047	moderate correlation	16.38%	+
socio-economic level	alcohol usage	.4033	moderate correlation	16.27%	+
additional agency involvement	psychological distress	.3897	low correlation	15.19%	+
length of stay	job performance	.3684	low correlation	13.57%	+
time out of program	quality of life	.3642	low correlation	13.26%	+
degree of pathology	coping skills	.3619	low correlation	13.10%	+
time out of program	alcohol usage	.3406	low correlation	11.60%	-
gender	close friends	.3394	low correlation	11.52%	+
time out of program	psychological distress	.3372	low correlation	11.37%	+
additional agency involvement	productive activities	.3275	low correlation	10.73%	+
gender	coping	.3182	low correlation	10.13%	-
entry grade	coping	.3169	low correlation	10.04	+
socio-economic level	close friends	.3096	low correlation	9.59%	-
entry grade	basic needs satisfaction	.3073	low correlation	9.44%	-
gender	basic needs satisfaction	.2938	low correlation	8.90%	-

Interpretation of Findings

A high correlation exists for intelligence quotient and number of days hospitalized after program. Sixty-one point 61% of the outcome (hospital days after entry) can be attributed to the independent variable of intelligence quotient. With a positive correlation, the implication is that as the measured intelligence score increases, the number of hospital days increases. As shown in Section Two of Chapter Four, hospitalizations diminished considerably for the members of Group A after program entry, on the average. For six members, nonetheless, it did increase, and for some, first admissions occurred after program entry. Perhaps, enough information and acceptance were attained to enable the more capable members to accept hospital treatment if and when necessary after program termination.

Interestingly, there is a moderately strong relationship between socio-economic level and number of days spent in psychiatric hospitals after program entry. It is possible that there is a relationship between intelligence quotients and socio-economic levels of Group A members that would explain this related finding. However, that relationship was not addressed in this work.

As one would expect, a relationship was found to exist between degree of pathology and psychological distress, as well as tolerance of distress. The moderately strong

association between pathology and distress is positive. Thus, the more disturbed the subject, the stronger the reported discomfort. This is supported by the finding that degree of pathology has a negative correlation with tolerance for distress. Thus, the more disturbed members of Group A report more distress and less ability to cope with unpleasant feelings. This finding is supported by much of the literature previously presented. Gossell, Lewis, Lewis, and Philips rank severity of psychopathology as most related to long-term outcome (1973). Hershowitz and Levy reported a "consistent pattern of interaction" between severity of pathology and long-term dysfunction (1974). It is important to note that the association between degree of pathology and coping skills is less substantial than the association between degree of pathology and psychological distress.

In addition to being related to the independent variable, degree of pathology, coping skills has a small degree of relationship with gender and entry grade.

The negative correlation between tolerance for distress and gender indicates that females have more difficulty coping than male members of Group A. This finding is supported by the previous determination that female members of Group A tend to exceed males, on average, in rate and duration of psychiatric hospitalization; often a consequence of the inability to cope with distress.

friendships is the third outcome with a relationship to gender. Approximately 11.5% of the close friendship outcome is attributed to gender. The direction of the association for these correlations indicates that maleness accounts for between 9% and 11% of the positive outcomes.

The final relationship involving gender is especially interesting. There is a substantial relationship between gender and the impact of ASP as perceived by Group A members. The finding indicates that 16.93% of the perceived program impact is accounted for by the gender of the population.

As discussed in Section Two of this chapter, male members of Group A seem to have a significantly greater decline in frequency and duration of hospitalization after entry to ASP. Therefore, it would appear that there may be a better opportunity for success with male students. It is interesting to note that gender is the only independent variable with a relationship to ASP impact.

In addition to gender, socio-economic level is the independent variable most prevalently associated to outcomes. In addition to accounting for 43.94% of the outcome, hospital days after program entry, socio-economic level is moderately related to job performance and alcohol usage. A low negative correlation also exists with close friendships. Thus 16.38% of the high scores in performance at work can be accounted for by a higher socio-economic

The third independent variable linked to coping skills is entry grade. With a positive low correlation, it would appear that tolerance of unpleasant feelings increases as entry grade level increases. As previously stated, for Group A members, entry grade is commensurate with entry age. Therefore, the interpretation of this finding seems to be that a small relationship exists between age and coping skills. Slightly more than 10% of the tolerance of distress is accounted for by grade (or age) at entry to ASP.

Gender and entry grade are further associated with basic needs satisfaction to a limited degree. The relationship between entry grade and basic needs satisfaction is negative. Therefore, based on the small sample of Group A, 9% of the degree of satisfaction reported is accounted for by entry grade age. The inverse relationship indicates that the outcome declines as program entry is delayed.

Basic need satisfaction appears higher for male members of Group A as indicated by the positive correlation between these two variables. The strength of this correlation is small, but significant. Approximately 9% of the level of satisfaction can be attributed to the gender of Group A members.

Thus, in terms of basic need satisfaction, and tolerance for unpleasant feelings, nine to ten percent of the outcome can be accounted for by the gender of Group A members. Close

status and 16.27% of the use of alcohol can be attributed to this demographic characteristic. The 9.59% coefficient of determination for the inverse relationship between socio-economic level and close friends, in this case, indicates higher socio-economic status is responsible for close friendships to a small degree.

Thus, it seems that affluence in Group A members is related, in varying degrees, to alcohol usage, job performance, close friendships, and rate of psychiatric hospitalization after program entry. As discussed previously, the possible association between measured intelligence quotient and socio-economic level for Group A members may account for the similar findings for those independent variables and should be investigated at a later date.

The amount of time members have spent out of the ASP, post discharge, is associated with three dependent variables, alcohol usage, psychological distress, and quality of life. The strongest correlation of the three is between time out of program and quality of life. This is the only association between the total outcome score and an independent variable. It indicates that the quality of life is, to a small degree, related to the time accumulated after discharge. This is an important finding in that it suggests long-term

implications. Perhaps, for Group A members, life improves with age.

The previous finding that zero hospitalizations had occurred for Group A members who had been out of the program for four and five years may be substantiation of this association with quality of life. Nevertheless, as five years is the maximum time out of the program, and only eight Group A members have been out of the program for more than three years, it would seem that further investigation is warranted. As time continues to pass for discharged members of Group A, additional findings may develop.

There is a small relationship between time out of the program and alcohol usage. As indicated earlier, alcoholic consumption is not perceived as a problem, on the average, by Group A members. The association here is most likely related to the natural maturation of Group A members as 11.60% of the usage of alcohol can be accounted for by time out of program.

The final finding pertaining to time out of the program is a low correlation with psychological distress. Apparently, 11.37% of the self-reported distress of Group A members can be attributed to time since discharge.

A low correlation exists for psychological distress and the involvement of additional agencies. The relationship between these variables seems obvious, one would expect them to co-vary.

Additional agency involvement is also related to productive activities not associated with work or school. The coefficient of determination indicates that 10.73% of the productive use of free time is accounted for by the involvement of additional agencies.

The final correlation exists between length of stay in ASP and productivity at work. Whether this association pertains to some particular aspect of longer tenure in the program or is related to the natural maturation which occurs over time is unclear. It is interesting that work productivity is the only outcome associated with length of stay.

Of interest to this writer is the absence of associations. One independent variable seems to be unrelated to outcome, as defined in this work, for the members of Group A. The number of days respondents spent in psychiatric hospitals prior to entering the ASP does not account for any significant outcome findings. Thus, is appears that this variable is not a useful predictor of outcome for Group A members.

Summary - Section Five

The relationship between specific sample characteristics and the quality of life experienced by client members are limited. Only twenty variable combinations show a significant level of correlation; less than 10% of the possible combinations. It is possible that the lack of correlation findings relate to the relatively small sample

size. Although statistically acceptable as a procedure, a larger population may yield more co-variance in variables.

Nevertheless, some predictors of outcome are evident. Measured intelligence quotients and socio-economic status account for 61.61% and 43.94%, respectively, of the rate of hospitalization after program entry. These two independent variables partially account for other outcomes as well and therefore may be important predictors of specific quality of life outcomes.

Gender is also an independent variable associated with several outcomes including satisfaction with basic needs, tolerance for distress, close friendships, and program impact. Maleness seems to account for at least a small amount of these outcomes and may be an indicator of a better quality of life in these areas. These findings further support the idea that the Adolescent Support Program has a stronger impact on male members.

Time out of the program is significantly associated with three outcome variables including general quality of life. The implication is that as time post-discharge accrues, members of Group A also experience a better quality of life, even though psychological distress and use of alcohol are also increasing.

It would seem, therefore, that these are the independent variables which co-vary most frequently with outcomes of

quality of life. Further investigation is warranted as the population grows in size and age.

Chapter Four Summary and Conclusions

The results presented in this chapter have been based on the exploration of the Adolescent Support Program as a treatment modality for a population of psychotic and borderline psychotic adolescents in Berkshire County. Several perspectives have been utilized. The psychiatric hospitalization history of Group members has examined the connection between a community-based treatment intervention and this negative outcome. Client members' perceptions of their current lives has been presented via the Oregon Quality of Life Questionnaire addressing how Group members are presently feeling and performing. In addition, clients' perceptions of the degree of impact the ASP has had on various aspects of the quality of their lives has been explored. Finally, the impact the program has had on the larger community as an alternative to hospitalization for the identified mental health adolescent population has been examined. Additionally, the "model ASP student", the prototypical member of Group A, has been presented to establish with whom the alternative treatment modality works.

Each of these results enhances each other by offering perspectives on, and understandings of the Adolescent Support Program. In sum, these results support the program as an effective treatment alternative for the severely emotionally disturbed adolescents involved.

The meaning and implication of these results needs to be considered and will be discussed in the final chapter of this study.

CHAPTER V

SUMMARY AND RECOMMENDATIONS

This study has explored a public school day treatment program, the Adolescent Support Program. It is a program designed to stabilize and maintain the Berkshire County adolescents, who are manifesting psychotic and borderline psychotic conditions, within the community. The intent of the study was to ascertain the degree of success the program has had in reaching its primary goal, namely the reduction of adolescent psychiatric hospitalizations. Additionally, the study has attempted to ascertain specific characteristic indicators of the quality of life for the sample population.

The issues have been approached from several perspectives which support each other in understanding the usefulness of the program, and for whom, in particular, the program is valuable. One perspective has been to examine the larger population of psychiatrically hospitalized adolescents over the past decade in Berkshire County. A second perspective examined the psychiatric hospitalization histories of the sample population with attention to pre- and post- program intervention. Together, these approaches have attempted to answer the research questions: How has the frequency and duration of psychiatric hospitalization changed for Berkshire County adolescents between 1976 and 1986?, and secondly, Does involvement in the Adolescent Support Program

influence the number of hospitalizations and lengths of stay for client members? It has been hypothesized that if the rate of hospitalization declined after the introduction of the treatment program, it could be concluded that the treatment program is at least partially related to that decline. In sum, this is, in fact, what the findings indicate. For the sample population, on average, frequency of hospitalizations declined by 58.33% and duration of hospitalizations decreased by 66.73% after program intervention. Thus it appears conclusive, for the sample population studied, involvement in the A.S.P. seems related to a significant decline in rate and duration of hospitalization.

The findings concerning the relationship between A.S.P. and the hospitalization patterns in the community are less clear. Although there appears to be a marked decline in the rate and duration of hospitalizations at the time A.S.P. was implemented, the pattern is inconsistent. Two expectations were presented: 1) that among the identified mental health adolescent population, fewer days would have been spent in psychiatric hospitals since the inception of the A.S.P., and 2) that a negative correlation would exist between the number of accumulated hospital days and the number of years of existence of the A.S.P. The first expectation has proven accurate. However, the second expectation has not. The data indicates a great deal of inconsistency over the past ten years indicating that there is not a direct relationship

between the A.S.P. and hospitalization records for the identified community mental health adolescent population.

The implication of these conclusions seems to be that A.S.P. is effectively reaching its primary goals with the sample population, but it does not appear to have had as direct an impact on the community on an on-going basis as had been expected. One possible explanation for this conclusion is the limited capacity of the A.S.P. With only twelve full-time students being serviced at a given time, the impact on the community is restricted.

Having established that A.S.P. was related to diminishing the negative outcome of the frequency and duration of hospitalization, on average, for client members, this study also explored positive outcomes of involvement in the program. Positive outcomes were defined in terms of quality of life measurements. The Oregon Quality of Life Questionnaire was utilized to measure several aspects of current life. Participants responded to questions concerning how they were feeling and doing recently in certain areas of their lives and on how much, if any, effect they perceive the A.S.P. as having had on their current quality of life. In sum, responding members report satisfaction with their lives and indicate that participation in A.S.P. is at least partially responsible for their current level of satisfaction.

The specific area respondents agreed upon as having been most impacted by the program is their education. As discussed earlier, Bloom and Hopewell (1982) found that the most significant difference between the "successful" and "unsuccessful" emotionally disturbed adolescents they studied was the involvement in public school programs. These authors defined success in terms of the absence of recidivism to psychiatric hospitals. This finding was further supported by the work of Ferdinand and Colligan (1980). It would seem that the work presented here offers additional support to the conclusion that, for adolescents, involvement in a public school educational program is related to self-perceived positive outcomes and the absence of, or decline in, negative outcomes.

The provision of opportunities to grow, learn, and develop problem-solving skills is a primary goal of the A.S.P. The findings of this work clearly indicate that this goal is being achieved. Thus, it seems evident that involvement in the educational component of A.S.P. is an important aspect of program effectiveness and seems further related to student success.

The second most prevalently agreed upon area positively effected by participation in the A.S.P. is psychological distress. Over 83% of respondents report that they feel better or much better due to A.S.P. intervention. It would seem that this finding relates to the provision of a safe,

predictable environment for the respondents. As discussed in the literature review, a structured environment is a central theoretical rationale of patient care for psychotic adolescents and adolescents with borderline psychotic conditions. Mayer (1985) states, "A structured environment is valuable therapeutically for psychotic adolescents" (p. 784). A safe, secure setting provided in the least disruptive manner is the major need of adolescents (Mayer 1985, Masterson, 1973). Mayer goes on to conclude that the environmental structure "fosters the perception, by patients, that it is a safe place in which they can trust themselves to deal with their internal turmoil" (1985, p. 792). The acceptance of and friendliness to the disturbed adolescent by the milieu is comforting, hence they "feel better". The provision of a safe, predictable environment is an established goal of A.S.P. It seems that the goal is being accomplished as it is interpreted here.

Additional support for this conclusion is presented by respondents in their evaluation of which A.S.P. services were helpful. Consensus indicates the program aspects related to the milieu are perceived as most helpful, i.e., keeping busy, being with people, physical activities, and limit setting.

The third greatest impact reported by respondents is in their ability to tolerate and manage unpleasant feelings. In a program designed to stabilize and maintain its participants in the community, the ability to cope with distress is of

paramount importance. The development of the ability to cope with and manage stress is another primary goal of the A.S.P. Therefore, it can be concluded, based on participants' perceptions and the diminished rate of hospitalizations, that the goal is being attained.

Another established goal of the A.S.P. is to develop students' interpersonal skills. This goal is based on the assumption that peer relationships is a dominant focus of adolescence, and also on the identified need that the target population experiences in the area of getting along with others in their environment. With 70.2% of respondents reporting interpersonal relationships with peers to have been improved or greatly improved by involvement in the A.S.P., it appears evident that the related goal is also being attained successfully.

The next sub-category of quality of life which the respondents report as having been positively impacted upon by involvement in A.S.P. concerns social supports. Almost two-thirds of the respondents report that they feel the supports they can count on in the community were increased due to involvement in the A.S.P. The goals which A.S.P. established which relate to this finding are stated in Chapter 1: Goal #7 - to engage parents/families in working with students, and Goal #8 - to provide access and delivery of additional or different services as indicated. Based on the

respondents' perceptions, it would seem that these goals are also being met successfully, on the average.

As A.S.P. is a program with very distinct limitations in terms of age appropriateness, services must terminate at a specific point. Even including the one year of follow-up services, A.S.P. is no longer available to participants by the age of 23. As many of the participants in the program are chronically disturbed, it is very important that transitional and supplemental services be available and acceptable to these adolescents. Based on the hospitalization histories presented in Chapter 4, Section 2, fourteen members of Group A were hospitalized post discharge from A.S.P. Four of these were within the first year. Perhaps the provision of transitional services were inadequate for these respondents. It seems likely that the community supports necessary to maintain certain Group A members in the community after A.S.P. services are terminated are not sufficient. Therefore, it is concluded that although supports from family, friends, and other have generally increased, for some respondents additional supports were necessary. Therefore, it seems appropriate to qualify the attainment of Goals 7 and 8 and conclude that additional work needs to be done in providing community supports to A.S.P. students after their discharge from the program.

Finally, more than 50% of the respondents identified improvement due to A.S.P. interventions, in the Quality of

Life sub-categories, of independence and productivity outside of work or school. These two sub-categories relate to the A.S.P. goal of preparing students for independent and adult living. On the average, it would seem evident that the goal is being met, however perhaps not optimally. Additional attention to programming in these areas may further enhance post-discharge success in terms of participants remaining within the community.

In summary, two additional perspectives have been presented in exploring the effectiveness of the Adolescent Support Program: student perceptions of the quality of their lives including A.S.P.'s impact on that quality, and the attainment of the program's primary goals as perceived by its client members. The following conclusions are offered in support of the effectiveness of the program:

1) participants feel better
2) participants cope better with distress
3) participants get along better with others
4) participants have better community supports (particularly during tenure in program)
5) participants are more independent and self-sufficient
6) A.S.P. is successfully attaining the primary goals it had established

It seems appropriate to conclude that A.S.P. is at least partially related to the decline in negative outcomes and the improved quality of life responding members report. Furthermore, it is concluded that for the population

considered in this work, the Adolescent Support Program has been a viable alternative to residential placement and/or psychiatric hospitalization. The results support the justification and enhancement of public school day treatment programs for severely emotionally disturbed adolescents.

The remaining research questions have explored the A.S.P. from a different perspective. First, the sample has been investigated in an attempt to ascertain the prototypical student of A.S.P. in terms of specific characteristics. These variables were then used to determine which characteristics of the sample, if any, are related to outcomes. These perspectives approach the issues concerning "who" is most likely to benefit from involvement in the A.S.P.

Although the results presented are limited, some characteristics seem more related to outcomes than others. The socio-economic level, intelligence quotient, gender, and time out of the program are the student characteristics (of the ten independent variables explored) which account for most of the significant relationships with outcomes.

These findings are based on a small sample, and may be a result of that limitation of the study. The thirty-seven responding members represent 86% of the total A.S.P. population. As the population increases, the opportunity for a more conclusive result will exist.

Having presented the specific conclusions of the study, it is valuable to explore the benefits of the study. Clearly, the Adolescent Support Program is benefited by the information in terms of self-evaluative processes. As presented, certain program aspects are perceived as more successful, more useful than others. The examination of the components and services which are working effectively and efficiently will aid in the continuing development of the program. This will, in turn, be of benefit to the Pittsfield Public Schools and the Department of Mental Health.

In a more generalized manner, the work presented supports the development and implementation of day treatment programs for severely emotionally disturbed adolescents. Thus, its findings will benefit other school systems and agencies seeking to establish day treatment programs utilizing an educational model.

Finally, this work adds to the literature in support of de-institutionalization and community services for the population studied, specifically, regarding the concept of least restrictive, appropriate placement. This study certainly validates an educational model of day treatment programming as an effective modality for addressing the specific needs of psychotic adolescents and adolescents with borderline psychotic conditions.

As results and discussion of this study have illustrated, there are many aspects remaining which require further

investigation. The questions and concerns raised by the findings of this dissertation point to the need for additional research as summarized below.

1. A follow-up study of Group A members, in future years, to determine the longevity of results specifically regarding positive and negative attributes of the quality of their lives as adults.

2. A comparable study of Adolescent Support Program students with a larger sample size thus providing a better basis for determining correlations of variables

3. A comparative analysis of the quality of life of students in a pre/post program intervention design.

This study has also identified opportunities for further exploration of the specific attributes of the Adolescent Support Program which are meaningful and helpful to its clients. The program can be effectively enhanced by studying the implications of this work and using the information in restructuring its treatment intervention plan.

APPENDIX

OREGON QUALITY OF LIFE QUESTIONNAIRE (Modified)

Note: This questionnaire is completely voluntary and confidential

These questions are about how you have been feeling and doing recently. Many aspects of life are covered - feelings, family, work, community life, etc. The purpose is to see if services you have received have been helpful in any of these important areas.

These questions ask about how you have been feeling in the past week. Pleasant and unpleasant feelings of several different kinds are covered.

In the past week, how often have you felt very restless, unable to sit still, or fidgety?
___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you enjoyed your leisure hours (evenings, days off, etc?
___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you felt preoccupied with your programs (can't think of anything else)?
___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you been pleased with something you did?
___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you felt unpleasantly different from everyone and everything around you?
___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you felt proud because you were complimented?
___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you felt fearful or afraid?
___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you felt that things were "going your way"?
___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you felt sad or depressed?

___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you felt excited or interested in something?

___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you felt angry?

___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you felt that life was going just about right for you?

___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you felt mixed-up or confused?

___ all the time
___ often
___ several times
___ none of the time

In the pat week, how often have you felt tense (uptight)?

___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you felt good about decisions you've made?

___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you had trouble sleeping?

___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you felt like you've spent a worthwhile day?

___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you had trouble with poor appetite, or inability to eat?

___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you felt serene and calm?

___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you had trouble with indigestion?

___ all the time
___ often
___ several times
___ none of the time

In the past week, how often have you found yourself really looking forward to things?

___ all the time
___ often
___ several times
___ none of the time

In the pat week, how often have you had trouble with fatigue?

___ all the time
___ often
___ several times
___ none of the time

Did ASP make any difference to the way you feel?

___ greatly improved it
___ improved it
___ no effect
___ made it worse
___ made it much worse

Everybody has unpleasant feelings sometimes: we wake up depressed, get upset or frustrated or frightened. These questions ask how much difficulty you have had recently in handling these unpleasant feelings.

How much difficulty have you had handling feelings of depression?

___ great difficulty
___ some difficulty
___ no difficulty

How much difficulty have you had handling being upset (over disagreements, etc.)?

___ great difficulty
___ some difficulty
___ no difficulty

How much difficulty have you had handling frustration?

___ great difficulty
___ some difficulty
___ no difficulty

How much difficulty have you had handling being frightened or shaken up (over accidents, etc)?

___ great difficulty
___ some difficulty
___ no difficulty

Has ASP made any difference to how you handle unpleasant feelings?

___ greatly improved it
___ improved it
___ no effect
___ made it worse
___ made it much worse

These questions ask about your living situation, eating, income, transportation, and medical care. The purpose is to see if these needs are met to at least a minimum level of satisfaction.

How satisfied are you with your home its state of repair, amount of room, furnishing, warmth, lighting, etc.?

___ very satisfied
___ satisfied
___ dissatisfied
___ very dissatisfied

How satisfied are you with your home, considering the amount of privacy, your neighbors, security, etc.?

___ very satisfied
___ satisfied
___ dissatisfied
___ very dissatisfied

Did ASP affect your living situation?

___ greatly improved it
___ improved it
___ no effect
___ made it worse
___ made it much worse

These questions ask about how well your income covers things you must have-- food, medicine, clothing, etc.

How adequate is your present income for your present needs?

___ very adequate
___ adequate
___ inadequate
___ very inadequate

Are you worried about your future income covering the things you must have?

___ terribly worried
___ quite worried
___ slightly worried
___ not at all worried

Did ASP affect your adequacy of your income?

___ greatly improved it
___ improved it
___ no effect
___ made it worse
___ made it much worse

Can you get around town as you need (to work, shopping, medical appointments, visiting, etc.)?

___ can't get around at all
___ with much difficulty
___ with little difficulty
___ no difficulty

Did ASP affect your ability to get around the community?

___ greatly improved it
___ improved it
___ no effect
___ made it worse
___ made it much worse

In the last month, have you had difficulty getting medical care?
___ yes
___ no

Do you have a regular or family doctor?
___ yes
___ no

Do you have medical insurance
___ yes
___ no

Do you know where to get emergency medical help?
___ yes
___ no

Did ASP affect your medical care?
___ greatly improved it
___ improved it
___ no effect
___ made it worse
___ made it much worse

These questions ask how you handle making decisions, dealing with conflict, asserting yourself, etc.

In the last week, how did you find shopping, paying bills, preparing meals, and looking after your basic necessities?
___ very easy
___ fairly easy
___ rather difficult
___ very difficulty

...and how enjoyable was it?
___ very enjoyable
___ fairly enjoyable
___ fairly unpleasant
___ very unpleasant

In the last week, how often did you go to social, recreational, educational, etc., events?
___ more than 3 times
___ 2 or 3 times
___ once
___ never

When you receive defective merchandise, unsatisfactory service, or are over-charged, how difficult is it for you to complain (to the store, etc.)?
___ can't do it at all
___ very hard
___ a little hard
___ not hard at all

When you want to join a conversation (e.g., at a party), how hesitant do you feel about doing so?
___ can't do it at all
___ very hesitant
___ slightly hesitant
___ not at all hesitant

When you are treated unfairly by someone you know well (family, close friend), how difficult is it for you to tell them so?
___ can't do it at all
___ very difficult
___ slightly difficult
___ not difficult

How confident are you in the decisions you make for yourself (what to buy, where to live, what to do, etc.)?

___ quite confident
___ some confidence
___ little confidence
___ no confidence

How often do you put off making important decisions until it is too late?

___ always
___ often
___ occasionally

Did ASP affect your ability to make decisions, deal with conflict, and assert yourself?

___ greatly improved it
___ improved it
___ no effect
___ made it worse
___ made it much worse

These questions ask how you have been getting along with people in the last week.

In the past week, how many times have you spoken with neighbors?

___ more than 3 times
___ 2 or 3 times
___ once
___ never

In the past week, how often have you spoken with people you saw at work or school or other daily activity?

___ more than 3 times
___ 2 or 3 times
___ once
___ never

Do you feel that people avoid you?

___ all the time
___ often
___ occasionally
___ never

Do you feel that people are not nice to you?

___ all the time
___ often
___ occasionally
___ never

How comfortable do you feel being around people?

___ very uncomfortable
___ uncomfortable
___ comfortable
___ very comfortable

Last week, how often did you get to places where you could meet new people?

___ every day
___ several times
___ once
___ not at all

Did ASP affect how you get along with people?

___ greatly improved it
___ improved it
___ no effect
___ made it worse
___ made it much worse

These questions ask how you have been getting along with your close friends recently.

How easily do make close friendships?

___ can't do it at all
___ with much difficulty
___ with a little difficulty

Do you have any close friends?

___ yes
___ no

(If "yes")

In the past week, how much of your free time did you spend with close friends talking or doing things together?

___ almost all
___ about half
___ very little
___ none

In the last month, how many times have you had contact by visit, phone, or mail with friends who live outside ASP?

___ quite often
___ several times
___ once
___ not at all

How much trouble have you had in your close friendships?

___ a great deal
___ quite a bit
___ a little
___ none

Did ASP make a difference in your close friendships?

___ greatly improved them
___ improved them
___ no effect
___ made them worse
___ made them much worse

There are some things we share with family and friends; some things we can count on them for. These questions ask about your family and friends, as you see them now.

When something nice happens to you, do you want to share the experience with your family?

___ always
___ often
___ sometimes
___ never

When something nice happens to you, do you want to share the experience with your friends?

___ always
___ often
___ sometimes
___ never

How much would your family be of help and support if you were sick, or moving, or having any other kind of problem?

___ a great deal
___ a lot
___ a little
___ none

How much would your friends be of help and support if you were sick, or moving, or having any other kind of problem?

___ a great deal
___ a lot
___ a little
___ none

How much would anybody other than your family and friends--volunteers, associations, clubs, etc.-- be of help and support to you if you were sick, or moving, or having any other kind of problem?

___ a great deal
___ a lot
___ a little
___ none

Did ASP affect the help and support you feel you can count on from family, friends, and others?

___ greatly increased it
___ increased it
___ no effect
___ made it worse
___ made it much worse

These questions ask about your work on the job.

Are you employed?

___ full-time
___ part-time
___ irregularly
___ not employed

(If employed)

In the last month, how much time did you miss from work?

___ several days
___ a day or two
___ an hour or so
___ none

In the last month, how much difficulty did you have in doing your work?

___ a great deal
___ quite a bit
___ a little
___ none

How did you feel about the quality of the work you did?

___ very good
___ good
___ bad
___ very bad

How much conflict have you had with people while you were working?

___ a great deal
___ quite a bait
___ a little
___ none

How interesting is your work?

___ very interesting
___ moderately
___ slightly
___ it's boring

In general, how much do you like your job?

___ really like it
___ like it
___ don't like it
___ hate it

In the last month, how many times did people complain about your work?

___ more than 3 times
___ 2 or 3 times
___ once
___ not at all

Did ASP affect the way your job went last month?

___ generally improved it
___ improved it
___ no effect
___ made it worse
___ made it much worse

These questions are about how things are going at school.

Are you enrolled in school, night classes, job training, etc.?

___ full-time
___ half-time
___ less then 1/2 time
___ no

How many hours did you spend in any other informal studying, reading for job promotion, correspondence courses, home extension, etc.?

___ 20+ hours
___ 8-20 hours
___ 1-7 hours
___ none

(If enrolled in school)

In the last week, how many classes have you missed from school?

___ all week
___ a day or so
___ one or two classes
___ none

In the last week, how well have you kept up with your school work?

___ completely
___ quite well
___ fairly well
___ not at all

How satisfied are you with the work you did for your classes last week?

___ very satisfied
___ quite
___ a little
___ not at all

In the last week, how many times have you had problems with people at school?

___ more than 3 times
___ 2 or 3 times
___ once
___ none

In the last week, how interesting was your school work?

___ very interesting
___ moderately
___ slightly
___ not at all

In general, how much do you like being in school?

___ really like it
___ like it
___ don't like it
___ hate it

In the last week, how many times did anyone complain about your school work?

___ more than 3 times
___ 2 or 3 times
___ once
___ not at all

Did ASP help you get into, or back into, or stay in, school?

___ yes
___ no

Did ASP affect the way school has gone for you?

___ greatly improved it
___ improved it
___ no effect
___ made it worse
___ made it much worse

These questions ask about some of the ways you spend your time when you are not working on the job, at home, or at school.

In the last week, how much time did you spend on recreation and sports?

___ 20+ hours
___ 8-20 hours
___ 1-7 hours
___ none

In the last week, how much time did you spend on your hobbies (or creative pursuits, etc., music)?

___ 20+ hours
___ 8-20 hours
___ 1-7 hours
___ none

Of the TV watching you did last week, how much time did you spend on really interesting programs?

___ 20+ hours
___ 8-20 hours
___ 1-7 hours
___ none

In the last week, how much time did you spend window shopping?

___ 20+ hours
___ 8-20 hours
___ 1-7 hours
___ none

Volunteer work is anything you do for someone else, on a fairly regular basis, that you don't get paid for.

In the last week, how much time did you spend on volunteer work?

___ 20+ hours
___ 8-20 hours
___ 1-7 hours
___ none

Not counting any time for which you were paid, how much time did you pass which you felt was boring and useless?

___ 20+ hours
___ 8-20 hours
___ 1-7 hours
___ none

Regarding the activities we've just talked about, did ASP affect how you spend your time?

___ made it much more satisfactory
___ made it more satisfactory
___ no effect
___ made it less satisfactory
___ made it much less satisfactory

These questions are about any contact you, personally, may have had with police, courts, etc., in the last month. We are not interested in any wrong-doing - - only in contact with legal agencies.

Have you had any contact with legal agencies?

___ yes
___ no

(If "yes", what kind of contact did you have in each of the following areas...)

Traffic-related

___ yes
___ no

Drug-related

___ yes
___ no

Alcohol-related

___ yes
___ no

Violence-related

___ yes
___ no

Theft-related

___ yes
___ no

Civil action (being sued)

___ yes
___ no

Commitment hearing (regarding your mental health)

___ yes
___ no

Did ASP affect any of your legal difficulties?

___ greatly reduced them
___ reduced them
___ no effect
___ increased them
___ greatly increased them

These questions are about drinking alcoholic beverages.

Have you had anything alcoholic to drink in the last month?

___ yes
___ no

(If "yes")

People sometimes have problems with using alcohol. The following questions ask about problems you may have had with alcohol in the last month.

Have you had problems with controlling your drinking?

___ very severe
___ a lot
___ a few
___ none

Problems with controlling your behavior because of drinking?

___ very severe
___ a lot
___ a few
___ none

Problems with your feelings (guilt, anger, depression) because of drinking?

___ very severe
___ a lot
___ a few
___ none

Problems with your health because of drinking?

___ very severe
___ a lot
___ a few
___ none

Problems with your parents because of drinking?

___ very severe
___ a lot
___ a few
___ none

Problems with your friends because of drinking?

___ very severe
___ a lot
___ a few
___ none

Problems with your spouse because of drinking?

___ very severe
___ a lot
___ a few
___ none

Problems with your children because of drinking?

___ very severe
___ a lot
___ a few
___ none

Problems with your job or school because of drinking?

___ very severe
___ a lot
___ a few
___ none

Problems with your other activities because of drinking?

___ very severe
___ a lot
___ a few
___ none

Did ASP affect any problems you may have had with alcohol?

___ greatly reduced them
___ reduced them
___ no effect
___ increased
___ greatly increased them

These questions are about drugs.

Have you used any drugs or medication of any kind, including prescription, over-the-counter, and street drugs in the last month?

___ yes
___ no

(If "yes")

People sometimes have problems with the use of drugs and medications. The following questions ask about problems you may have had with drugs in the last month.

Have you had problems with controlling your use of drugs?

___ very severe
___ a lot
___ a few
___ none

Problems with controlling your behavior because of of drug use?

___ very severe
___ a lot
___ a few
___ none

Problems with your feelings (guilt, anger, depression) because of drugs?

___ very severe
___ a lot
___ a few
___ none

Problems with your health because of drug use?

___ very severe
___ a lot
___ a few
___ none

Problems with your parents because of drug use?

___ very severe
___ a lot
___ a few
___ none

Problems with your friends because of drug use?

___ very severe
___ a lot
___ a few
___ none

Problems with your spouse because of drug use?

___ very severe
___ a lot
___ a few
___ none

Problems with your children because of drug use?

___ very severe
___ a lot
___ a few
___ none

Problems with your job or school because of drug use?

___ very severe
___ a lot
___ a few
___ none

Problems with your other activities because of drug use?

___ very severe
___ a lot
___ a few
___ none

Did ASP affect any problems you may have had with drug use?

___ greatly reduced them
___ reduced them
___ no effect
___ increased them
___ greatly increased them

Your caseworker may have done some of the things listed below. These questions ask how helpful you feel these things were.

How helpful was <u>listening</u> to you-- just letting you say what you felt?

___ very helpful
___ helpful
___ no effect
___ harmful
___ very harmful
___ NA

<u>Comments:</u>

How helpful was caring about you and the things bothering you?

___ very helpful
___ helpful
___ no effect
___ harmful
___ very harmful
___ NA

How helpful was encouraging you?

___ very helpful
___ helpful
___ no effect
___ harmful
___ very harmful
___ NA

How helpful was telling you about things--employment, community services, how to relate to people, how one's mind works, etc.?

___ very helpful
___ helpful
___ no effect
___ harmful
___ very harmful
___ NA

How helpful was attempting to calm your worries, relieve your fears, etc.?

___ very helpful
___ helpful
___ no effect
___ very harmful
___ NA

How helpful was setting limits for you and helping you keep them (e.g., deadlines for getting things done, how much you can demand)?

___ very helpful
___ helpful
___ no effect
___ very harmful
___ NA

Some of the following may have been available for you. These questions ask how helpful you found each in dealing with the problem which brought you to ASP.

How helpful was your counselor?

___ very helpful
___ helpful
___ no effect
___ harmful
___ very harmful
___ NA

How helpful were your own friends?

___ very helpful
___ helpful
___ no effect
___ harmful
___ very harmful
___ NA

How helpful were any medications supplied or prescribed by ASP?

___ very helpful
___ helpful
___ no effect
___ harmful
___ very harmful
___ NA

How helpful were your religious associations?

___ very helpful
___ helpful
___ no effect
___ harmful
___ very harmful
___ NA

How helpful were counselors in <u>other</u> programs, or private counselors?

___ very helpful
___ helpful
___ no effect
___ harmful
___ very harmful
___ NA

How helpful was the passing of time?

___ very helpful
___ helpful
___ no effect
___ harmful
___ very harmful
___ NA

How helpful were crisis intervention services to you?

___ very helpful
___ helpful
___ no effect
___ harmful
___ very harmful
___ NA

How helpful was keeping busy?

___ very helpful
___ helpful
___ no effect
___ harmful
___ very harmful
___ NA

How helpful was being with people?

___ very helpful
___ helpful
___ no effect
___ harmful
___ very harmful
___ NA

How helpful was physical activity - running, swimming, walking?

___ very helpful
___ helpful
___ no effect
___ harmful
___ very harmful
___ NA

How helpful was your family?

___ very helpful
___ helpful
___ no effect
___ harmful
___ very harmful
___ NA

How helpful were group meetings at ASP?

___ very helpful
___ helpful
___ no effect
___ harmful
___ very harmful
___ NA

How helpful was your family doctor?

___ very helpful
___ helpful
___ no effect
___ harmful
___ very harmful
___ NA

Was anything else of particular help to you in dealing with the problem which brought you to ASP?

Comments:

These questions ask about the service you received at ASP.

Did you have any difficulty finding out about ASP? ___yes ___no

Did you have any difficulty getting into ASP? ___yes ___no

When you came to the program, did the staff make you feel comfortable? ___yes ___no

Was your first contact with a caseworker satisfactory (when you discussed why you had come, etc.)? ___yes ___no

Was your caseworker's attitude toward you satisfactory? ___yes ___no

Were medications you received and the process of getting them satisfactory?	___yes	___no	___NA
Was your caseworker accessible to you - could you get to your caseworker when you needed to?	___yes	___no	
Were the individual sessions you had with your caseworker satisfactory?	___yes	___no	
Were the group sessions you had with caseworkers and other clients satisfactory?	___yes	___no	
Was the attitude of staff toward you, as a client, satisfactory?	___yes	___no	
Was the decision to end your participation in ASP made in a satisfactory way?	___yes	___no	
Did you get the kind of service you wanted?	___yes	___no	
If you were to seek help again, would you go back to ASP?	___yes	___no	

Do you have comments, criticisms, or suggestions about ASP?

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